

Oriental Bird Club



Bulletin 28 • November 1998



The Oriental Bird Club aims to:

■ encourage an interest
in the birds of the
Oriental Region and
their conservation

■ liaise with and
promote the work of
existing regional
societies

■ collate and publish
material on Oriental
birds

Two bulletins and a journal,
Forktail, are published annually.

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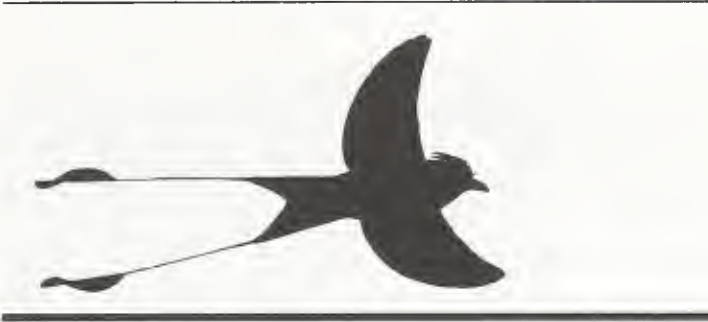
Membership of the Club is open to all and for 1998 costs £15 per annum (£10 reduced rate for nationals living in Oriental countries who cannot afford the full rate), £20 Family, £25 Supporting Member (funding one Oriental member in addition to ordinary membership), £25 Libraries and academic institutions, and £45 Business Supporters. Special arrangements for payment exist in USA, Thailand and India. To join or for further details please contact the Membership Secretary, OBC, c/o The Lodge, Sandy, Bedfordshire, SG19 2DL, UK.

OBC Web Site

<http://www.orientalbirdclub.org/>

Cover illustration:

Maroon Oriole *Oriolus traillii* by Lalmalsawma, one of the birds he regularly encounters around his home in Mizoram.



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Club News



Annual General Meeting, London, 12th December 1998

This year's AGM is a joint meeting with the British Ornithologists' Union. It will be held as usual at the Zoological Society Meeting Rooms, Regents Park, London NW1.

The meeting is on Saturday 12th December with doors opening at 11.00 a.m. and proceedings getting underway at 11.40 a.m. There will be three speakers: incoming OBC Chairman Nigel Collar will speak on Species Limits in Asian Birds – The New Challenge; Roger Safford will talk about Vietnam and Pam Rasmussen from the Smithsonian Institution in Washington will tell us about the Asian bird records of Richard Meinertzhagen.

Election of Council members will see Nigel Collar settling into the Chairman's chair after Nigel Redman steps down. Many thanks to the latter for chairing the Club so frequently! Graeme Spinks (Treasurer) is standing down after five years looking after the Club's finances but will remain on Council. We are very grateful to him for his sterling service. Margaret Sykes has kindly agreed to take over this crucial position. Adrian Pitches (Publicity) is standing down after four years on Council and Steve Rowland will take over the Publicity role.

The Club is seeking an Assistant Promotions Officer to understudy Richard Eden and a new Membership Development Officer to replace Steve Rowland.

Amongst the talks and official business, there will also be the usual sales bazaar of books, audio and OBC goods. And the usual delicious food will of course be on offer.

British Birdwatching Fair, August 1998

This year's Bird Fair (at Rutland Water in the English Midlands) was the most successful yet for the OBC. The Club took a double stand for the three-day event and, despite torrential rain of Oriental magnitude on the Sunday, raised substantial sums for the Conservation Fund.

The total takings during the Fair were more than £4,000, with the Club T-shirts being particularly good sellers, accounting for a quarter



Members of the OBC team proudly display the third prize award for the best conservation stand at the Fair.

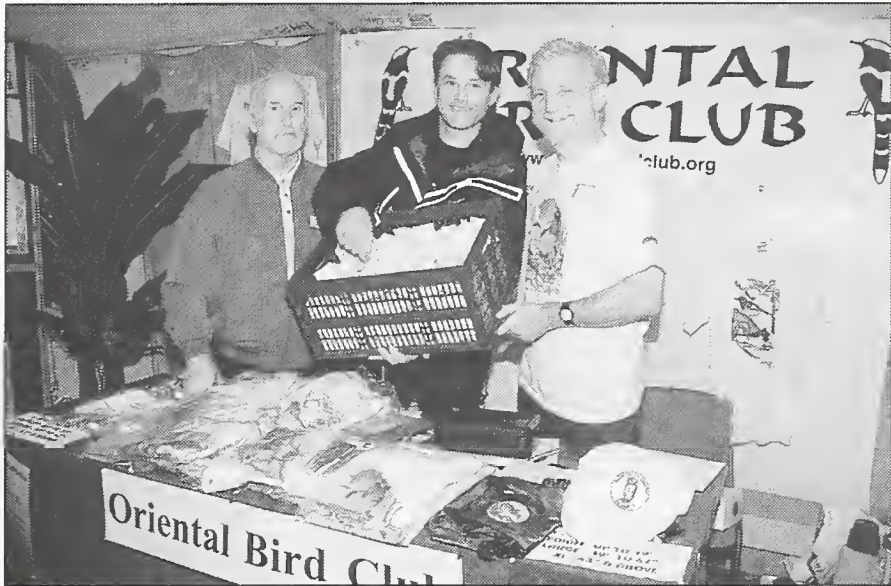
of the total raised. But it was the Prize Draw which really boosted the Club's takings. The lucky winner was Eric Pilcher from Essex, an OBC member who has actually spent much of his time in Africa. More than £2,000 was raised for our conservation work through the sale of raffle tickets for the draw. Thanks go to Leica who yet again generously provided an irresistible pair of their 8 x 32 binoculars as first prize and to other Mega Prize Draw prize donators, especially Wildsounds and Lynx Edicions, as well as to the hundreds of people who bought draw tickets.



LEICA

The appearance of the stand was greatly enhanced by the generous loan of office plants by the Milton Keynes firm Bumble Bees and the Club won third prize in the Bird Fair's best conservation stand contest behind the Royal Society for the Protection of Birds and the Royal Society for the Conservation of Nature, Jordan. Clearly the Club will have to change its name to the Royal Oriental Bird Club if we are to win next year!

Special thanks go to Brian and Margaret Sykes for their Herculean efforts on our stand at the Bird Fair – and to Richard Eden and his family of Prize Draw ticket sellers! Thanks to all the other Council members and volunteers who also staffed the



TV personality Chris Packham and Leica's Barry Kehoe with OBC Council member Brian Sykes at the OBC's Grand Raffle Prize draw.

stand. We are now taking bookings from interested participants for next year's Bird Fair...

Special thanks also go to Tim Loseby for presenting the OBC Lecture on Threatened Birds of the Orient. This is the second year running that Tim has helped the Club in this way.

OBC Blakeney Meeting, August 1998

The traditional August Bank Holiday meeting at Blakeney in Norfolk was another successful gathering. Talks ranged right across the Orient with Krys Kazmierczak taking us to the mountains of Arunachal Pradesh in north-east India, Rod Martins taking us to the forests of Sichuan in China and Guy Dutson taking us on an oceanic cruise through Polynesia. Thanks to all them of them for such a diverse and interesting session of lectures.

Thanks go to Pete Morris the Meetings Officer who arranged an excellent meeting as well as marshalling an army of helpers to assist with the catering arrangements. Special thanks too to Mrs Shears for baking the superb Oriental Bird Club cake which was first prize in the raffle draw on the day and to Wildsounds and Pica Press for generously donating other prizes.

Paintings Auction

Artists Tim Worfolk, Michael O'Clery and Lalmalsawma have all generously donated paintings to raise money for the Conservation Fund. Sealed postal bids for Tim's painting, which graced the 1998 T-shirt, Michael's Green Avadavats, which were on the cover of the June 1998 Bulletin and this month's painting of a Maroon Oriole by Lalmalsawma should be sent to the OBC c/o The Lodge, Sandy, Beds SG19 2DL, UK with the envelope marked "paintings" by 1st

March 1999.

Birds of Burma

The Club still has two copies of the pioneering work by Bertram Smythies, generously donated to the Club by the author. They are available to the highest bidder, all proceeds from the sale will go to the OBC Conservation Fund.

Copy 1 is a 1st Edition published by the American Baptist Mission Press, Rangoon in 1940. It is in very good condition, including the original wrapper [in fair condition, in two pieces], some adhesive tape damage, protected by an outer soft plastic cover. It is inscribed by the author to his parents. Only 2000 copies were printed. After the Japanese invasion of Burma in 1942, all surviving copies in the A.B.M. stock were sent to Japan, where they were later destroyed during an air raid.

Copy 2 is a 2nd edition published by Oliver & Boyd, Edinburgh in 1953. This is in excellent condition, including wrapper and is also inscribed by the author to his parents. The second edition was rewritten by the author during 1948 following the loss of the 1st edition stock.

Sealed bids should be sent in envelopes marked 'Birds of Burma' to the OBC address at 'The Lodge' before March 1st 1999. OBC Council has reserve prices for the books & bids will be matched to them.

Corrigendum

Photograph 4 on page 47 of Bulletin 27 was incorrectly labelled. The caption should have read **Greater Adjutant** *Leptoptilos dubius* by P. M. P. Potts. We apologise to the author and photographer concerned for this error which was introduced during the editing and production stages.

Profile: Nigel Collar, the incoming OBC Chairman

If one was asked to name a book that saved the world, it would be an impossible task. But if one was asked to name a book that saved the world's birds, there is only one candidate. *Birds to Watch 2* lists in lucid, readable prose the 1,111 species threatened with extinction and sounds a warning we ignore at our peril.

The senior author is BirdLife International Research Fellow – and internationally acknowledged expert on threatened birds – Nigel Collar. From this year's AGM he will be able to

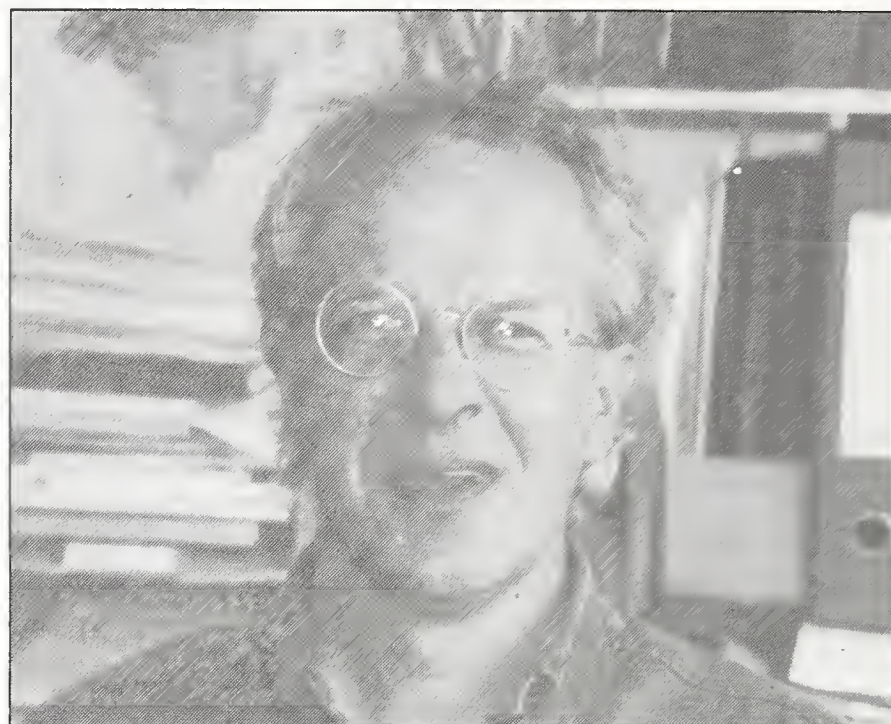
add 'Chairman of the Oriental Bird Club' to his curriculum vitae.

Nigel is a youthful 52 years old, approaching a quarter century in bird conservation yet cheerfully claims a world bird list of under 400. He grew up in Bristol in the West Country of England and spent his formative birding years at nearby Chew Valley Lake. He read English at Cambridge University then took a doctorate on George Orwell at the University of East Anglia.

So, no background in science but by 1975 he was working in bird conservation for the Great Bustard Trust. In 1978 he joined the editorial team working on the mammoth task of publishing the nine-volume *Birds of the western Palearctic*.

In 1981 he returned to threatened birds research when he joined the International Council for Bird Preservation (now BirdLife International). In the past 17 years he has overseen the publication of Red Data Books to the birds of each continent (Asia is imminent), culminating in *Birds to watch 2*.

Nigel is the backroom boy par excellence – his meticulous research in museums and libraries complements the work of biologists out in the field. That backroom role explains why an expert on the world's rarest birds has a world bird list smaller than many British birders' UK lists. He may attend conferences around the globe but he never gets out of the lecture hall – after two trips to Venezuela he has seen just six species! It was on one such trip that he had his first taste of Oriental birding; as Nigel explains: 'Just about the best two hours birding I've ever spent was at Taman Negara (Malaysia) in 1982. I was with Phil Round and Dennis Yong on a day trip during an IUCN meeting.' That acquaintance with Phil Round was to pay dividends four years later as Nigel took a break after completing *Threatened birds of Africa* before turning his attention to the book on the Americas. 'I wanted to investigate one Oriental species as a kind of tip of the hat to Asia, and I chose what seemed to me then to be the most mysterious and possibly important species. I did not realise until I looked at the skins what an astounding bird Gurney's Pitta *Pitta gurneyi* was, and it became as much an obsession for me to uncover its whereabouts as it turned out that it had for some years been for Phil Round. Our collaboration – me researching every piece of evidence at the book and museum end, Phil putting it all into the context of his extensive experience – led by good fortune and Phil's hard work to the bird's rediscovery. And it was *just* in time. I'm immensely relieved I didn't leave doing



that bird until now as the forest at Khao Nor Chuchi (in Thailand) would probably have gone completely.' But the future for Gurney's Pitta remains bleak – as it does for many of the Orient's forest birds. However, Nigel feels the continued existence of those 1,111 threatened birds of the world is in our hands. 'The good news is that we, by which I mainly mean birders, keep finding new populations of species that we thought were at death's door – or discovering that they are commoner than we had thought. The bad news is that such things only seem to buy us a bit more time, but not necessarily enough to make a difference in every case. There's just so much to do.' He warms to his theme as he considers the role of the OBC in the new millennium. 'I believe in the power of birdwatching and birdwatchers to influence the future of the planet for the better. So birdwatching has got to grow as a pursuit and passion to the point where it really has a constituency politicians would recognise. I nurture the ambition that the OBC will continue to grow and will continue to expand its Asian membership. I want to record my admiration for the Club's publications which are brilliant – and for the remarkable dedication of Council members past and present who've done a fantastic job promoting the Club in ways that would make most professional bodies envious. One of the most important dimensions to the Club, of course, is the Conservation Fund. I should be interested to know what members think about how we could increase this because I certainly want to expand our influence as a conservation body.' No doubt the OBC will rise in prominence with such an influential member of the world birding community at the helm. Members will have an opportunity to share their thoughts with him at the AGM in London when he will be speaking on "Species limits in Asian birds – the new challenge."



Conservation Fund

Compiled by Marcus Kohler with contributions from
Anny Andaryati, Phil Benstead and Carol Inskipp.

GRANT ANNOUNCEMENTS

In this Bulletin two new projects from Indonesia and one from Nepal are announced. OBC is concerned that small grants applications have been down for the last six months, possibly as a direct result of the poor distribution of conservation leaflets last year. On the positive side, however, there has been an excellent response to an e-mail flyer distributed through various conservation groups on the internet, and already two new applications have come from this source.

All OBC members are asked to consider the possibilities for conservation grants when they are working or travelling in the region and to contact Marcus Kohler if they would like further information.

Fauna study and ornithological ecotourism, Togian Islands, Sulawesi, Indonesia



Didi Indrawan has been awarded a grant of £500 to provide training as rangers for three local people from the 'Togian Ecosystem Network', a non-government organisation focusing on community based development of ecotourism. The group will also undertake a wildlife inventory of the Togian Islands prior to the development of an ecotourism resort. OBC are also providing a field guide, donated by Natural History Book Services, and four pairs of binoculars donated by the Royal Society for the Protection of Birds (RSPB). At the time of going to press OBC is still looking for a courier to transport the binoculars to Java prior to the commencement of the project.

Status survey of Cheer Pheasant in Dhorpatan, Nepal

Suresh Shakya has been awarded a small grant to undertake a study of the Cheer Pheasant *Catreus wallichii* in the region of Dhorpatan, Nepal. The project aims to study the feeding ecology of this species and also to campaign within local villages to raise community awareness of the need to conserve local fauna and flora. This would have been the most detailed survey to date in this poorly known area; regrettably, however, the project has been suspended indefinitely because of Maoist terrorist activity in the Dhorpatan region.

Birdwatcher corner programme, Cibodas National Park, Java, Indonesia

Agus Supriatna of KPB Cibodas, an indigenous conservation NGO based in Cipanas, West Java, has been awarded a grant of £380 to create a birdwatcher corner at the Cibodas (Gede-Pangrango) National Park. People visiting the park to birdwatch will be encouraged to visit the corner and raise their awareness of general conservation issues. The site will be staffed by group members who will provide a guide service. Maps, field guides,



Chestnut-headed Bee-eater *Merops leschenaulti* by Charoenpong Chulert

Bird survey of the lowland forest of Sikkim, India

a bird database and photographic displays of local birds will be provided in the corner. The group will also offer binoculars for hire thanks to another donation of four pairs of used binoculars from the Royal Society for the Protection of Birds. The Natural History Book Service (NHBS) has kindly donated four copies of the *Field Guide to the Birds of Borneo, Java and Bali* which have been sent to this project.

CONSERVATION FUND IN ACTION

OBC has received five final projects reports since Bulletin 27. There are three important surveys from India, including a study on the Indian Bustard *Ardeotis nigriceps*, the results of our 100th project on crane migration through Pakistan and an outstanding conservation awareness project from the children of Dek Rak Pa School in north-east Thailand.

A small grant funded a survey of the threatened birds of the lowland forest fragments in south Sikkim, India, concentrating on the area of the proposed Kitam Wildlife Sanctuary. This site lies within the Eastern Himalayas Endemic Bird Area (EBA D08). The study found approximately 160 bird species including the globally threatened Ward's Trogon *Harpactes wardii* (new record for Sikkim), Blue-naped Pitta *Pitta nipalensis* (few recent Indian records), Collared Treepie *Dendrocitta frontalis* (rare outside Arunachal Pradesh) and the only records this century in Sikkim of Red-throated Flycatcher *Muscicapa parva*. Sadly it would appear that Rufous-necked Hornbill *Aceros nipalensis* no longer occurs in Sikkim. The main threats to the area were identified as habitat loss and fragmentation, timber poaching and livestock grazing. The report recommends: raising conservation awareness amongst the local people; long-term monitoring of the forest resource in Sikkim; declaration of a trans-boundary protected area encompassing the forests of Kitam and Peshoke; and assistance for forestry staff to enforce protection of the remaining forest.

Usha Ganguli-Lachungpa
c/o Gaden Lachungpa
Atlas Mfg. Co.Pvt. Ltd
No 9 Supermarket
Gangtok 737 101
Sikkim
India

Island breeding birds in Chambal Sanctuary, Madhya Pradesh, India

A small grant of £500 funded a survey from December 1996 to December 1997 of the nesting ecology of island breeding birds in the National Chambal Sanctuary along a 80 km stretch of the river Chambal.

Chambal is a south-western tributary of the Ganges and the river was declared a crocodile sanctuary during 1978/79 to protect habitat for the Gharial *Gavialis gangeticus* and other wild



Lineated Barbet *Megalaima lineata* by Chaiya-srisa

animals. Information was gathered from local people to help locate nesting sites and three nesting islands were identified.

The breeding biology of four bird species was studied: Indian Skimmer *Rynchops albicollis*, River Tern *Sterna aurantia*, Great Thick-knee *Esacus recurvirostris* and Small Pratincole *Glareola lactea*. Studies were made on the time of nesting, nest size and distribution, incubation period, hatching times, nest predation and post-hatching social organisation. Most nests were found scattered over the islands although some were clustered together.

Many chicks on low-lying islands were drowned in May when there was a sudden rise in river level following heavy rains. As river levels fell later, cattle from nearby villages were able to reach the islands and several nests were trampled. Out of a total of 22 Indian Skimmer nests found, around 42% of eggs were lost and the chicks' survival rate was only 43%. River Tern nests showed a similar survival rate, 41% and 43% respectively. Only six Great Thick-knee nests were found; 50% of the eggs were lost and the chicks survival rate was only 40%. Nearly one-third of Small Pratincole eggs were lost and only 52% of chicks survived.

Eighty disturbances along the riverbanks from agriculture, sand mining, illegal fishing, ferry services, cattle grazing and wood collection were recorded. The report recommends that cattle are prevented from reaching the nesting islands by fencing off access points.

Dr R. K Sharma
National Chambal Sanctuary
PO Box 29
Morena 476001
Madhya Pradesh
India

Raising awareness of the plight of the Indian Bustard in Rajasthan, India

An OBC small grant funded a conservation awareness project on the plight of the globally threatened Indian Bustard *Ardeotis nigriceps* in the Sorsan protected area of south-east Rajasthan. Habitat loss, disturbance and hunting have all been identified as threats to this species in the past. The Indian Bustard is protected in India and Sorsan is one of several sanctuaries set up to protect this and associated species like the Lesser Florican *Sypheotides indica*.

The project targeted school children in villages peripheral to the 35 km² protected area. A questionnaire was distributed to form a basis for assessing the success of the project. Educational material, produced in the local language and distributed by the project, consisted of two children's board games and a workbook describing the fauna of the region. Forest guards and other villagers are also expected to benefit from the workbook.

Subsequent feedback questionnaires have revealed an increased level of awareness and understanding about wildlife amongst the school children. Recommendations made by the project are to include conservation education in the school curriculum, to continue the conservation awareness effort among

Asian Palm-Swift
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Asian Palm Swifts *Cypsiurus balasiensis* by Vicharn Poansai

The project concluded that although the forest was heavily disturbed, it is still rich in bird diversity and the community must act to protect it. The students found that fires, mostly man-made, are the major threat to the Pa Son Nongkhu Forest. A depressing note was that students found a general apathy amongst forestry officials and that some were directly involved with illegal logging of pine trees.

When asked what insight they had gained from their fieldwork, students said they had found a far greater bird diversity than expected and learnt of the changing bird communities through the seasons. The students improved their identification skills and their bird sketching abilities, and achieved various individual goals within the project. All agreed that they had learned patience and endurance, and to overcome their fear of being alone in the forest. In the words of one student, Vicharn Poansai, 'I was very happy doing this bird survey. No one forced us. We were totally free to do what we wanted to do – which was to watch birds at our own pace... Doing the bird survey is sometimes very tiring, sometimes fun. But most of the time it is fun... Whenever I step into a forest, I feel at peace. I feel I'm among friends even when I am alone. At these times many questions would pop into my mind.'

Oy Kanjanavanitar c/o Green World Foundation
394/46-48 Maharaj Road
Tatien, Bangkok 10200
Thailand

Line drawings in the Conservation Fund section are by students of Dek Rak Pa School. The drawings are taken from their Completion Report submitted to the OBC following the Conservation Awareness project carried out at the school. The drawings depict field sketches as well as the extensive field notes taken by the enthusiastic students.



Around the Orient

Compiled by Adrian Pitches

CHINA

Cheng Tso-hsin (1906–1998)

It is with deep regret that we announce the death of China's leading ornithologist, Cheng Tso-hsin, at the age of 91. Cheng is probably best known in the West as author of *A Synopsis of the Avifauna of China*, published in English in 1987, but his contribution to Chinese ornithology was monumental. He wrote about 150 monographs and specialist reports as well as dozens of articles aimed at popularising birds to a wider Chinese public. Cheng was truly the father of modern Chinese ornithology and was president emeritus of both the China Ornithological Society and the China Zoological Society. He will be greatly missed for his warmth and enthusiasm and for inspiring large numbers of students to study the birds of China and to work for their protection.

Tan Yaokuang

We were also greatly saddened to hear of the death of OBC China representative Tan Yaokuang at the age of 64. Tan was the author of some 40 articles and books, contributed to the *Aves* volumes of the series *Fauna Sinica* and was co-editor of the invaluable *Bibliography of Chinese Ornithology* (1990). As China representative, Tan helped to spread word of the OBC in China and we are deeply grateful for his efforts to

strengthen ties between Chinese and foreign ornithologists.

First Japanese Swamp Warbler in Heilongjiang

Japanese Swamp Warbler *Locustella pryeri* has been recorded for the first time in Heilongjiang, the *Sichuan Journal of Zoology* (1997.3) reports. A male bird was taken as a specimen at Zhalong nature reserve on 20th May, 1996. Cheng Tso-hsin in his 'Synopsis' says this species is 'very rare', and known in China only from a few records from near Wuhan in Hubei, Chaoyang in Liaoning and Qinhuangdao in Hebei. The report says this bird skulks in reedbeds and that it can be confused with Rusty-rumped Warbler *Locustella certhiola*.

Wintering Red-crowned Cranes in Shaanxi

A wintering population of Red-crowned Cranes *Grus japonensis* has been found in Shaanxi, the first record for the province and the westernmost in China, the magazine *Chinese Wildlife* (1998.3) reports. Chinese ornithologists conducting a survey of the wetlands of the upper Huang He (Yellow River) discovered a flock of over 40 birds on 5th February 1995 in the Dali area, followed by an even bigger flock of 140 found further north at Heyang on 10th February, as well as a separate flock of 10, also in the Heyang area.

INDONESIA

Two new National Parks on Sumba

Indonesia has declared two new National Parks on the island of Sumba in East Nusa Tenggara Province.

The new parks will protect some of the country's most important remaining forests which are home to 12 threatened bird species of which seven are endemic to Sumba. These include the Sumba Hornbill *Aceros everetti*, Sumba Boobook *Ninox rudolfi*, and the pigeons *Treron teysmanii* and *Ptilinopus dohertyi*.

The Manupeu-Langgaliru National Park (87,984.09 ha) in West Sumba will protect the largest remaining tract of lowland semi-deciduous monsoon forest on Sumba and includes the rugged limestone escarpment of Manupeu.

The Laiwangi-Wanggameti National Park (47,014 ha) in East Sumba includes the largest tract of closed canopy forest on Sumba rising from sea level to Sumba's highest peak Gunung Wanggameti at 1,225 m. It supports five endemic birds as well as 72 other bird species and 43 species of butterfly.

This is an historic declaration and it is a major step forward for conservation on Sumba which is all the more impressive given that it comes at a time when Indonesia is in the depths of a severe economic crisis.

Sujatnika of the BirdLife International-Indonesia Programme has been closely involved with the project. He said: 'The declaration of these two new National Parks is an exciting development. It appears to be an excellent example in Indonesia of a conservation project working from the bottom upwards; local communities were first consulted about a proposed new protected area, then local organisations, local government and forestry departments all gradually added their support until the idea has been accepted all the way to the top.'

The on-going involvement of local people in the development of the National Parks is essential if they are to be a success. Local people's strong traditional culture is in part linked to their close relationship with the forests. Fuel woods, rattan and other fibres, plants for dyes and medicinal uses are all collected. The forest also maintains and guarantees a year-round supply of water to the island's two largest towns, Waingapu and Waikabubak.

Before this new declaration the protected area coverage in Nusa Tenggara was only 3% of the land area (10% of forests) compared with, for example, Irian Jaya where 8% of the land area is protected (19% of forests).

Source: *Birdlife International*

THAILAND

Thailand halts plans to build a road around Khao Yai National Park

The Royal Forestry Department's (RFD) plan to

build a road right round Khao Yai National Park has been halted by the Agriculture Minister, Pongpol Adireksarn. He has also vetoed similar schemes for other national parks in Thailand.

But the decision did not come until the first 128 km stretch of road had been completed. Conservation groups, justifiably alarmed by the plan to build the road, are now lobbying the RFD to prevent the new road being opened as it provides access to Khao Yai to loggers and poachers.

RFD Director-General Sathit Sawintara has now said the road will only be used by park rangers and would not be opened up for public use, yet local people are demanding to use it.

The RFD planned a 320 km long road all the way round Khao Yai to create a buffer zone which would mark the park boundary and prevent fires on neighbouring farmland spreading to the park.

Now Pongpol has told the RFD the remaining 192 km of boundary should be fenced with acacia and other shrubs which would be a lot cheaper than completing the ring road. The projected cost of a 320 km road was 130 million baht. Pongpol said: 'There might be some money left from the project as a fence should be cheaper than a road. I think that money should be used to repair the damaged sections of the existing concrete road in the park.' He continued: 'The controversy at Khao Yai makes it obvious that roads are not the best choice as boundary markers for national parks.'

Pongpol has ordered a review of RFD plans for

boundary roads around a further eight national parks, including Phu Kradung.

Source: *The Nation* 7.12.97

Bird's nest soup is big business

Bird's nest soup is a billion baht business in Thailand. In the run-up to a new round of concessions on Thailand's offshore islands, the trade has come under the media spotlight. An analysis by the Bangkok Post has thrown light on what is a very shady business that can generate huge sums of money for concessionaires – and the Government department which licences them – but yields nothing for local people.

The Post report also exposes the huge discrepancy between the declared harvest of Edible-nest Swiftlet *Collocalia fuciphaga* nests reported to the Revenue Department – and the amount exported, as reported to the Customs Department. Concessions to harvest swiflet nests are granted for five-year periods with all concession fees going to central government. No money is redistributed to local communities, indeed local people are barred from setting foot on islands in their locality by the terms of the concessions. The Post also claims that this law is ruthlessly applied with many villagers 'legally' murdered for landing on the concessionaires' islands. One worker described to the *Sunday Perspective* newspaper how the island guards allegedly kill interlopers on the grounds of self-defence.

Birds nests are *very* big business. Concessionaires pay

10,600 baht per kilogramme of nest harvested. In 1998 alone it is estimated that the Thai government will collect 70 million baht revenue from nest harvesting in the provinces of Prachuab Khiri Khan, Chumphon, Surat-Thani and Phattalung. But that is just the revenue from the *declared* harvest. However, there is a huge gap between that figure and the quantity of bird's nest leaving the country. In 1996, for example, the biggest concessionaire, Rangnok Laemthong (Siam) Company told the Revenue Department it had exported 700 kg of material. But the Customs Department records that Rangnok and the smaller concessionaires between them shipped 9,000 kg of bird's nest abroad.

Bird's nest collection has been a lucrative trade in Thailand for 300 years. The nests are collected from swiftlet nesting caves on more than 50 islands off the Thai coast. And the harvesters do not collect just one nest from each pair – they usually take two so the birds will have to construct three nests if they are to rear young. The nests are constructed from saliva drawn from beneath the swiftlets' tongues. Both birds produce the saliva, which solidifies on contact with air. It takes 30–35 days to build a nest. To build three will therefore take about 100 days by which time the swiftlets' saliva glands are exhausted and the final nest is also cemented with blood, feathers and eggshells. Since licensing started 40 years ago, only one company has been granted continuous concessions – Rangnok Laemthong. It's eighth five-

year contract expired in October 1998 but the Finance Ministry renewed its ninth concession in July 1997. The haggling between the company and the Finance Ministry in the run-up to renewal saw the value of the concession spiral from 136 million baht for 1993–1998 to 360 million baht in 1998–2003, an incredible 165% increase. The company paid 25% of the concession fee in advance. Truly bird's nest harvesting is a profitable business for humankind – but not for the swiftlets.

Source: *Bangkok Post* 29.3.98

TAIWAN

Black-faced Spoonbill wintering area under threat
Plans for Taiwan's largest-ever industrial zone on the wintering grounds of half the world's remaining Black-faced Spoonbills may be thrown out.

The Pingnan industrial zone has the support of most local people because it promises thousands of jobs in one of the poorest parts of the island: Tainan county, 240 km south of the capital, Taipei.

The area of ponds, wetlands and saltfields supports 20,000 fishermen's jobs – and nearly 300 Black-faced Spoonbills *Platalea minor*.

However the majority of the 1.2 million people living in the region want to see the coastal lagoons drained so that an oil refinery, plastics factory, steel mill and port can be constructed.

However, Taiwan's Environmental Protection Association opposes the plans which may yet be scaled down or cancelled. Then the spoonbills and other

waterbirds dependent on the coastal marshes would only have fall-back plans for an international airport to contend with...

Source: *The Cambodia Daily* 30.3.98

Pheasant-tailed Jacana in danger of extinction in Taiwan

The Pheasant-tailed Jacana *Hydrophasianus chirurgus* looks set to be railroaded out of Taiwan. The last breeding site for the bird on the island is in the path of a proposed high speed rail link between the capital, Taipei and Kaohsiung.

In 1997 there were fewer than 20 jacanas left at Hulupi near Tainan on the route of the proposed express railway. The previous year's census had logged 80 birds. The Taiwan Bird Club now says the railway will extinguish the breeding population of jacanas.

Source: *Taiwanese newspaper* 24.9.97

White-eared Night Heron *Gorsachius magnificus* on sale in a Nanning market

The South China Biodiversity Team, of Kadoorie Farm & Botanic Garden of Hong Kong, was doing a survey of wildlife trade in Nanning, Guangxi, on the afternoon of 29th May 1998. In the second shop visited, a medium-sized dark brown heron was seen on sale in a small cage, together with a Yellow Bittern *Ixobrychus sinensis*. The bird was first identified by the author as a juvenile White-eared Night Heron *Gorsachius magnificus* because of its colour, white spots on the wings and underparts, large eyes, short bill and distinctive head pattern. It was still a nestling and seemed to be only 4–8 weeks old.

We purchased the bird for 45 RMB and asked the seller where it had come from. He told us it was from somewhere near Nanning. The bird seemed to have been caught just a few days before, had undamaged feathers and was quite healthy. We bought some meal worms from the market and force-fed the bird. Water was also given to it. It is currently in the care of Prof. Zhou Fang of the Guangxi Agricultural University. According to Prof. Zhou, the bird will learn to fly soon and it also needs to be trained to catch prey. It is expected that the bird will be ready for release in mid-August.

The White-eared Night Heron is endemic to China where it is only classified as a National Class II Protected Species although many ornithologists consider it second only to Crested Ibis *Nipponia nippon* in rarity and degree of endangerment. IUCN has listed it as a Critically Endangered species. Little is known about the

distribution of the White-eared Night Heron. The species was first taken from Wuzhishan in Hainan Island by John Whitehead in 1899. Before the 1990s, there were only 13 records in China: three from Hainan Province, two from Guangdong Province, one from Guangxi Zhuang Autonomous Region, one from Anhui Province, one from Zhejiang Province and five from Fujian Province.^{1,2} Outside China there has been only one record, from northern Vietnam (Zhou F., pers. comm.). In the 1990s there were several records from southern and central Guangxi³ (Zhou pers. comm.). The present record confirms that a White-eared Night Heron population still exists in southern Guangxi, and this may be the only sizeable population remaining. Therefore proper protection of this population is essential for the survival of the species. Further studies on the population status and threats are planned by Kadoorie Farm & Botanic Garden, in collaboration with Professor Zhou and the Forestry Department of Guangxi.

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Juvenile White-eared Night Heron *Gorsachius magnificus* rescued from a Nanning market (Photo Lee Kwok Shing)

Status and conservation of the White-winged Duck in eastern Assam, India

The White-winged Duck *Cairina scutulata* is one of the rarest wildfowl in the world. It is a bird of the tropical wet evergreen forest and it is threatened by habitat destruction and hunting. Once widespread throughout north-eastern India, the species is now confined to a few small areas. This article presents the known status of this duck in the eastern Assam districts of Tinsukia and Dibrugarh, known to be a stronghold of the species based on fieldwork carried out by the author from 1992 to 1996.¹

The White-winged Duck is a shy and secretive species and determining its population is difficult. My own field observations suggested a total of around 300 individuals in Tinsukia and Dibrugarh,¹ with the majority in the Upper Dihing Reserved Forest (west block) where the best and most extensive habitat occurs. This important area has not been fully covered in earlier works, leading to lower population estimates,^{2,3} although some accounts of its past abundance in the area are known.³⁻⁶ Other major strongholds are Dibru-Saikhowa and Upper Dihing (east block), Joypur and Dum Duma Reserved Forests.

During fieldwork I observed birds in Upper Dihing (west block), Dum Duma and Dangori Reserved Forests and Dibru-Saikhowa Sanctuary and its presence was confirmed in Burhi-Dihing (two blocks), Dirak, Duarmara, Digboi (west block), Hahkhati, Kakojan, Kotha, Kumsong, Mesaki, Namphai, Phillobari, Tinkopani, Tokowani, Torani and Upper Dihing (east block) Reserved Forests in Tinsukia district. Dibru-Saikhowa Sanctuary lies partly within both districts, but in Dibrugarh district a resident population was confirmed in Joypur Reserved Forest whilst there is also a recent record from Namdang Reserved Forest.

No birds were seen in the previously known haunts of Kundil Kaliya, Sadiya Station or Kukuramora Reserved Forests, all in the Sadiya area of Tinsukia district.⁷ However, birds were recorded in several tea estates and forest villages, where they occur as visitors, including Rongagora, Koomsong, Phillobari and Bogapani Tea Estates plus the forest villages of Lakhipathar, Choraipung, Dhekiajan, Borjan, Dimoruhola, Nagajan and Natungaon. Elsewhere in Assam the continued occurrence of this species was confirmed in Nameri National Park, Gibbon (Hollongapar) Sanctuary and Nambor Reserved Forest (north block).⁸

White-winged Ducks were usually encountered on jungle pools (natural depressions, ditches, small reservoirs *etc.*), sluggish channels, river pools, secluded bheels (ox-bow lakes) and occasionally lagoons of larger rivers (mainly on the Brahmaputra and Lohit Rivers). Most of these were located in tropical evergreen rainforest, although in Dibru-Saikhowa they were found in *Salix* swamps and marshes surrounded by deciduous forest. They were also observed in heavily polluted ponds that had been dug for oil-mining operations in the Digboi-Upper Dihing areas. The minimum habitat requirement seems to be small waterbodies lined with good tree cover (for seclusion, safety, roosting and nesting). Many of the known sites, like Dangori and Dum Duma Reserved Forests, have secondary or degraded forest due to logging operations, yet the species seems to be surviving, although in depleted numbers.

The White-winged Duck is a resident species throughout its range⁹⁻¹¹ although it is possible that there is some significant local movement depending on water conditions. A record from Jatinga¹² and one I observed at a small reservoir in Digboi Town, where there is no suitable habitat nearby, are an indication of this. Indeed, they are strong fliers, with a slow wingbeat and usually remaining at or below the canopy level. Inside the forest they follow nullahs or river courses but sometimes they circle overhead shortly after take-off, making them vulnerable to hunters. White-winged Ducks sometimes give a honking call in flight, or when flushed or when alarmed. A most remarkable call heard was at Dum Duma Reserved Forest in the early morning of 10 December 1992. Three ducks in flight uttered a loud *kee-a kee-a* followed by a few quacks, reminiscent of the call of a female domestic duck.

The species is crepuscular and mostly seen at dawn and dusk when birds fly to and from their

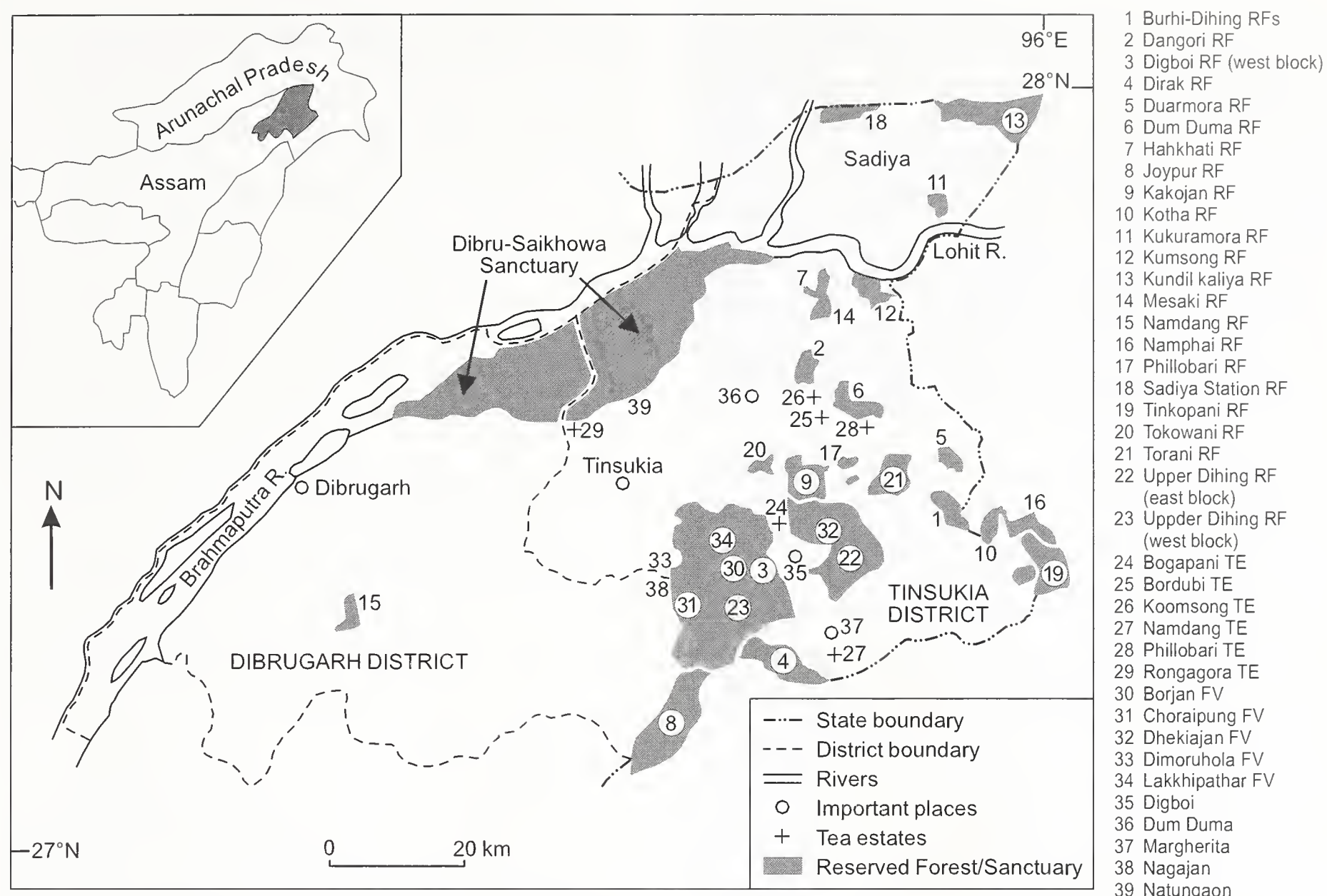


Fig. 1. Map of Dibrugarh and Tinsukia districts of Assam, India, showing the places/areas mentioned in the text.

roosting and feeding sites. At night they often feed at ponds and watered paddyfields near forest villages, nullahs in tea gardens and large open waterbodies when there is no disturbance from humans. In areas where disturbance is less, like Dum Duma and Upper Dihing Reserved Forests, the ducks remain active during the daytime.^{13,14} When roosting, they prefer horizontal branches near water and often more than one family group will roost together. Birds have been recorded roosting in the following tree species: *Diptocarpus macrocarpus*, *Ficus* sp., *Artocarpus chaplasi* plus two more unidentified types.

White-winged Ducks breed during the wet season, March to October, with egg-laying continuing until late June.^{1,15} Five nests examined were in seasonally flooded forest and the tree species in which nests were found were *Salix tetrasperma*, *Bischofia javanica* and *Pterospermum acerifolium*. The nesting holes are normally in trees over open water to ensure the ducklings will have a safe landing.

The average clutch size is six with a maximum reported of fifteen. The ducks seem to prefer nesting in bowl-shaped cavities at the top of

broken tree trunks. Four nests examined were from 6 to 7 m above the ground but for the first time I also discovered two cases of ground nesting.¹ One was on a stream bank beneath a large fallen log and the other was amongst a dense stand of *Arundo donax* reeds on a small island in a pond. More than 30 new and old nesting sites were identified, half of which were in the Upper Dihing Reserved Forest (west block).

White-winged Ducks usually occur in pairs or in small family groups. Lone birds are sometimes seen but the commonest number is three; one male plus two females.¹ In Dangori Reserved Forest on 15–16 November 1995 I observed a group of seven birds and a party of 14 consisting of three groups plus a lone individual.

Conservation

White-winged Ducks are protected under Schedule 1 of the Indian Wildlife Protection Act 1972 which prohibits their killing or live capture. It is also listed in Appendix I of CITES and as endangered by IUCN.¹⁶ Four notified protected areas in Assam have known populations of this duck: Dibru-Saikhowa, Nameri National Park,

Garampani Sanctuary and Gibbon (Hollongapar) Sanctuary, yet habitat destruction is threatening the White-winged Duck throughout its range and its survival depends on the continued existence of forest cover. Expansion of agriculture, tea plantations, encroachment into reserved forest areas (including the unauthorised expansion of forest villages), logging, the collection of fuel wood and various development activities like road construction, installation of oil rigs inside forests and above all the continued human population pressure are the main causes of habitat destruction. Poaching with guns and bow and arrows, trapping with snares and collection of eggs and ducklings are also important factors in the decline of the White-winged Duck in the region. Although most of the poaching, including the collection of eggs and ducklings, goes unreported, my studies indicate that around 50% of the total birds poached are taken as live ducklings.

The area is one of the leading oil and tea producing zones in India and the pollution of waterbodies by oilfields and the pesticides used in tea plantations are also matters for concern. Villagers and tea garden labourers who go fishing and wood-cutting also cause a lot of disturbance inside the forests.

Two captive breeding centres were established in Tinsukia district, at Bordubi Tea Estate in 1975 and at Namdang Tea Estate in 1991, under the auspices of the Assam Valley Wildlife Society. The survival rate of birds raised on these was only 23% during 1986 to 1992. There was an outbreak of avian tuberculosis and mycotoxicosis and these, coupled with severe inbreeding of the birds and poor management techniques, led to a failure of both projects. Yet research for the projects did reveal the causes of the White-winged Duck's decline and the captive breeding programme was of real benefit in educating local people about the plight of this species and about conservation in general. There are also instances of local villagers successfully raising birds from collected eggs (incubated by chickens) and rearing captured ducklings to maturity. Many of these ducks fly off into the jungle whilst others are sold in local markets for food.

Adequate protection of existing habitat and better enforcement of conservation measures in the field are strongly recommended. Key sites proposed for protected area status following my field surveys¹ are the Upper Dihing (west block)-Joypur-Dirok Reserved Forests (proposed as the

Upper Dihing National Park, 267 km²), and as wildlife sanctuaries, Dum Duma-Dangori Reserved Forests (38 km²), Kumsong Reserved Forest (15 km²) and Namphai Reserved Forest (17 km²). In addition, the oilfield area near Digboi is to be declared a nature reserve by the Indian Oil Corporation¹⁷ (see also *OBC Bull.* 27: 18). Immediate steps should also be taken to check pollution by pesticides and oil. Commercial felling of trees, including the removal of old and dead trees (used by the ducks for nesting) in known habitats should be stopped. Capture of more wild birds for captive breeding should be discouraged and more effort put into preserving the wild population.

Although my studies¹ have shown that the wild population of the White-winged Duck is higher than was previously thought,² it is still a bird in grave danger, with a declining wild population and a shrinking habitat.

Acknowledgements

The author thanks the Oriental Bird Club for a small grant (assisted by Wildwings). For assistance during field studies I thank R. Bhattacharjee, Yunus Ali, S. Buragohain, M. Duara (all DFOs), N. Baruah, T. Das (both ACFs), Narayan Sharma (Range Officer, Guijan), S. Kalita (Forest Guard) and other Forest Department staff; K. Hilaly, R. K. Shome (both EACs), M. Pegu (APO), Kamal Kalita, L. Barua, Munin Hazarika (all JEs), Bolo Paul, Ranjit Doley, Gabrel, Dilip Handique, Babul Debnath and Hakeem Choudhury. Special thanks are due to Bhuram Gogoi, Paniram Das, Theebu and Nur Husain, who not only accompanied me during many field trips but who also lent their considerable expertise to these visits.

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1. A jungle pool inside dense rainforest near Choraipung, Upper Dihing (west block) Reserved Forest, Tinsukia – typical habitat for the White-winged Duck *Cairina scutulata* (three ducks are visible).
2. A White-winged Duck *Cairina scutulata* in the wild in Choraipung area of Upper Dihing (west block) Reserved Forest, Tinsukia district, Assam.
3. Wild-caught White-winged Ducklings *Cairina scutulata* from Upper Dihing (west block) Reserved Forest, Tinsukia district, Assam.
4. An immature White-winged Duck *Cairina scutulata* with domestic Muscovy Ducks *C. moschata* and Chickens *Gallus gallus* in Dimoruhola Forest Village near Upper Dihing (west block) Reserved Forest.

All Photos by Anwaruddin Choudhury



New information on the birds of Seram, Indonesia, and their conservation

A team of biologists spent six weeks in 1996 conducting biological surveys of north-east Seram, an area that has received very little ornithological attention.

Background

The island of Seram in eastern Indonesia lies in the biogeographical region of Wallacea, the interface between Asian and Australopapuan faunas, which is famous for high levels of avian endemism.¹⁻³ Increasing pressure on natural resources in Wallacea has led to the current rarity of many species,⁴ and data are lacking for many more. On Seram and its satellite islands there is thus a need for information on the status, distribution and requirements of 30 restricted-range species (those with world ranges <50,000 km²), fourteen of which are endemic and five threatened.^{4,5}

Most of these 30 species occur in Manusela National Park (see Fig. 1), the largest protected area in Maluku province, which covers around 10% of the Seram Endemic Bird Area (EBA) and contains all of its forest ecosystems from sea-level to over 3,000 m.⁵ Recent visits to the island to collect information on species of conservation concern have concentrated on this park^{6,7} whilst only brief visits have been made further east.⁸

Between July and September 1996 *Wae Bula '96* (a conservation expedition from Cambridge University and Universitas Pattimura, Ambon) visited forested sites in north-east Seram, to carry out biological surveys. Our aim was to clarify the status of scarce birds in this little-visited region and to contribute to assessing the importance and efficacy of Manusela National Park as the sole protected area in the Seram EBA.

Project results

Although the north-eastern coastal lowlands are fairly heavily deforested, habitat on the hilly hinterland is virtually intact. Three forested sites were studied (see Fig. 1): Wae Fufa (primary lowland and lower montane evergreen forest), Hoti (coastal secondary lowland forest) and Wae Salas (riverine secondary lowland forest). During fieldwork 139 bird species were recorded.⁹

The species of particular conservation or biogeographic interest are listed in the following sections along with a brief summary of their status. For further details see Isherwood *et al.*^{9,10}

Threatened species

Seram has never been linked to any other land mass¹¹ and so it is presumed that the **Southern Cassowary** *Casuarius casuarius* was introduced by man.¹² Nevertheless, with numbers declining throughout its range because of intense hunting pressure^{4,13} this island population is important from a conservation perspective. The species appears to be considerably more common in eastern Seram (several were encountered at Hoti and Wae Fufa) than in Manusela National Park and environs, where it is rare.⁷ **Lazuli Kingfisher** *Todiramphus lazuli* is thinly distributed in north-eastern Seram, favouring secondary habitats in the lowlands much as elsewhere on the island.¹⁴ As deforestation on the island is likely to benefit this species and it appears to tolerate human disturbance, it is no longer considered threatened.¹³ The spectacular **Salmon-crested Cockatoo** *Cacatua moluccensis* was widely dispersed in the Wae Fufa valley and in degraded coastal forests near Hoti, where raucous pairs and small flocks were a common sight. At higher altitudes, the distinctive call of the **Purple-naped Lory** *Lorius domicella* was frequently heard along the Fufa watershed ridgetops at 600–900 m. Both these beautiful endemic parrots are threatened by trapping for the cage-bird trade, and it seems likely that the bulk of their populations occur in eastern Seram, especially as trappers are reported by locals to travel from relatively far afield (e.g. Piru Bay, Haruku and Saparua) to exploit this resource. Observations of parrots at our sites were certainly much more frequent for several species than those recorded in Manusela National Park.^{7,15}

Three more threatened species known from Seram are **Moluccan Scrubfowl** *Megapodius wallacei*, which lays eggs under sand (reportedly on certain beaches in the north-east, but this was not conclusively established), **Lesser Masked Owl** *Tyto sororcula*, which has been observed very infrequently recently, and only once on Seram, and **Black-bibbed Monarch** *Monarcha boanensis*, which survives in very low numbers in remaining fragments of forest on the satellite island of Boano (see Fig. 1).



Fig. 1. Map of Seram

Near-threatened and restricted-range species

Many restricted-range species are common on Seram, both in Manusela National Park and in the recently surveyed north-east, thus requiring no specific conservation effort. These include **White-eyed Imperial-pigeon** *Ducula perspicillata*, **Red Lory** *Eos bornea*, **Drab Myzomela** *Myzomela blasii*, **Moluccan Hawk Owl** *Ninox squamipila*, **Grey-necked Friarbird** *Philemon subcorniculatus*, **Drab Whistler** *Pachycephala griseonota*, **Moluccan Cuckooshrike** *Coracina atriceps*, **Streaky-breasted Fantail** *Rhipidura dedemi*, **Slaty Monarch** *Myiagra galeata*, **Cinnamon-chested Flycatcher** *Ficedula buruensis*, **Long-crested Myna** *Basilornis corythaix* and **Ashy Flowerpecker** *Dicaeum vulneratum*.

The **Rufous-necked Sparrowhawk** *Accipiter erythrauchen* was seen only twice (in the Wae Fufa valley) but this probably reflects the unobtrusive habits of a non-soaring forest raptor rather than its scarcity. Another uncommon or unobtrusive forest species was **Pale Cicadabird** *Coracina ceramensis*, which appeared much less abundant than its widespread and superficially similar congener, **Common Cicadabird** *Coracina tenuirostris*, the opposite situation to that reported from Manusela National Park.⁶

We also found that two endemic species remain (or have become) somewhat enigmatic: firstly, the **Grey-collared Oriole** *Oriolus forsteni* was originally thought to be 'widespread, judging from its distinct call',⁶ but this conclusion was modified when it became apparent that the provenance of these calls 'always turned out to be the endemic friarbird *Philemon subcorniculatus*'.¹⁵ Given the vocal and morphological similarity between these mimetic species,¹⁶ utmost caution must be exercised in identifying the oriole. This has resulted in only very few confirmed records since the last specimens were collected earlier this century,¹⁵ including at least three seen during Wae Bula '96 in the Wae Fufa catchment.⁹ Secondly, the

Moluccan Thrush *Zoothera dumasi* has not been recorded during recent fieldwork on Buru (¹⁷, M. K. Poulsen verbally 1998), was encountered only once in Manusela National Park on Seram⁶ and was listed as data-deficient by Collar *et al.*⁴ On the ridgetops of the Wae Fufa watershed we observed a *Zoothera* sp., presumably this species, on seven occasions between 800 and 1,000 m. However, characteristics of the Manusela birds do not match the old specimens of *Z. dumasi joiceyi* (^{6,7}, J. Bowler *in litt.* 1997) and our very brief observations shed no more light on the remote possibility that more than one *Zoothera* thrush might in fact inhabit the forests of Seram. Both these species require considerable further research to clarify their distribution and conservation status.

The **Moluccan King Parrot** *Alisterus amboinensis*, along with **Great-billed Parrot** *Tanygnathus megalorhynchus* and **Eclectus Parrot** *Eclectus roratus*, was encountered much more frequently than in Manusela National Park,^{6,7} adding to the general impression that north-east Seram supported healthier populations of lowland and mid-altitude parrots, possibly because the impact of commercial trading has not yet been felt in this remote region. In addition, two near-threatened species, **Eastern Curlew** *Numenius madagascariensis* and **Great-billed Heron** *Ardea sumatrana*, were observed at coastal sites, the latter for the first time on mainland Seram (see ¹⁰).

Species such as **Long-tailed Mountain Pigeon** *Gymnophaps mada*, **Blue-eared Lory** *Eos semilarvata*, **Grey-hooded White-eye** *Lophozosterops pinaiae* and **Seram Honeyeater** *Lichmera monticola* occur at higher altitudes than are found in eastern Seram and were thus not recorded by the project. The apparent absence of **Bicoloured White-eye** *Tephrozosterops stalkerii* from eastern Seram is particularly interesting because most fieldwork was conducted in the narrow altitudinal band supposedly favoured by the species.⁷ It may prove to be more scarce than initially suspected.

Other noteworthy records

Five species with wider ranges were observed for the first time on, or near, Seram: **Wandering Whistling-duck** *Dendrocygna arcuata*, **Little Kingfisher** *Alcedo pusilla*, **Caspian Tern** *Sterna caspia*, **Brown Goshawk** *Accipiter fasciatus* and **Island Whistler** *Pachycephala phaionotus*. Interestingly, the whistler and kingfisher have very recently been observed for the first time on



1. Drab Whistler *Pachycephala griseonota* (Photo Joe Tobias)
2. Streaky-breasted Fantail *Rhipidura dedemi*, endemic to Seram (Photo Isabel Isherwood)
3. Lesser Frigatebird *Fregata ariel* (Photo Jon Ekstrom)
4. Salmon-crested Cockatoo *Cacatua moluccensis*, an endangered species found only on Seram and its satellite islands (Photo Jon Ekstrom)
5. Island Whistler *Pachycephala phaionotus*: although this species has a fairly large geographical range, it only occurs on small offshore islands (Photo Joe Tobias)

Buru¹⁸ and are perhaps likely to be recent colonists on these islands. Other species had been recorded only on very few previous occasions, e.g. **Great Knot** *Calidris tenuirostris*, **Long-toed Stint** *Calidris subminuta* and several other Palearctic breeding waders (see ^{7,19}), **Gurney's Eagle** *Aquila gurneyi* (we recorded the first apparent breeding record for the island in the Wae Fufa valley) and **Pied Heron** *Egretta picata*. For details of these observations see Isherwood *et al.*^{9,10}

Conservation outlook

The general conclusion is that Manusela National Park is well sited to protect Seram's endemic and threatened birds and should be supported accordingly. In particular, endemic species restricted to high-altitude forest have very small ranges outside the park, although this habitat is not currently threatened by deforestation.

Nevertheless, the forests of north-east Seram appear important for Southern Cassowary, parrots such as Purple-naped Lory and Salmon-crested Cockatoo, and probably Moluccan Thrush. Although the area currently supports a small human population with relatively minor environmental impact, transmigration initiatives are scheduled which will greatly increase both the number of people residing in lowland areas and the local rate of habitat destruction. We strongly recommended that forest in the Wae Fufa watershed and adjacent river systems is gazetted as a nature reserve to protect against future development and alterations in land use. In addition, measures to control and monitor the trade in parrots throughout Wallacea are urgently required.

Acknowledgements

We are particularly grateful to the following people for their assistance in the field, and improvements of texts: Sammy Kuriake, Irwansyah Reza Lubis, Hanny Notanubun, Michael Poulsen and John Putnarubun. The most generous financial sponsors of the project were the Loro Parque Fundación, the New York Explorers Club, Albert Reckitt Charitable Trust, Shell International, the People's Trust for Endangered Species and the Royal Geographic Society. All other project sponsors are listed by Isherwood *et al.*⁹

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Bird trade in Vietnam

In OBC Bulletin 14 (November 1991) Jonathan Eames compared the bird trade at the Bangkok weekend market with Ho Chi Minh City's Cau Mong market. This was probably the first time anything had been published on Vietnam's significant trade in native birds. Since the publication of the article, Cau Mong market has been demolished although new markets have sprung up around Ho Chi Minh City to take its place; this is not the only change to have occurred.

When the well-known Cau Mong bird and animal market in central Ho Chi Minh City was closed in 1996, many of the traders moved out to Cholon, Ho Chi Minh City's Chinatown, to trade at Le Hong Phong and Thuan Kieu bird markets. These are now the two main markets. Additionally, the bird shops and mobile bird sellers can often be seen pushing hand carts around the city streets, loaded with bamboo cages of birds or riding bicycles with a stack of bird cages on the back.

The other major change since 1991 is the far greater variety of species now for sale. The three most numerous species in 1991 were the Scaly-breasted Munia *Lonchura punctulata*, Eurasian Tree Sparrow *Passer montanus* and Spotted Dove *Streptopelia chinensis*. Whilst these three are still offered in large numbers, it is now common to see Common Mynas *Acridotheres tristis* and Oriental White-eyes *Zosterops palpebrosa* for sale. All the aforementioned species are sold cheaply. The munias and sparrows are bought in large numbers by religious worshippers who release them to gain merit for themselves. The doves, mynas and white-eyes are sold for around US\$2 each and are often bought as children's pets. The most popular species amongst the ever-increasing number of bird keepers are now songbirds, especially the White-rumped Shama *Copsychus malabaricus*, Magpie-robin *C. saularis*, Pied Bushchat *Saxicola caprata*, Hwamei *Garrulax canorus* and Black-throated Laughingthrush *G. chinensis*. Other species regularly seen for sale are Red-billed Leiothrix *Leiothrix lutea*, Silver-eared Mesia *L. argentauris*, Golden-fronted Leafbird *Chloropsis aurifrons*, Blue-winged Leafbird *C. cochinchinensis*, Oriental Skylark *Alauda gulgula*, Red-whiskered Bulbul *Pycnonotus jocosus* and White-crested Laughingthrush *Garrulax leucolophus*. A full list of species observed for sale from 1991 to 1997 is given in Table 1.

Starting prices for songbirds are around US\$5 for a newly captured bird to well over US\$100 for a good songster. Owners teach their birds to sing using cassettes of bird songs or by taking their birds along to certain parks where they hang their bird cages up next to other birds. Several

species, notably Hwamei, Magpie-robin and White-rumped Shama, are also trained to fight. Two cocks of the same species are introduced into a cage and bets are placed as to which bird will dominate as they begin fighting. The fight is invariably stopped before serious injury occurs to either bird.

Most of the birds offered for sale in Ho Chi Minh City are captured in the surrounding southern provinces, although Hwamei and Red-billed Leiothrix come from northern Vietnam and China. The most popular method for capturing songbirds uses a specially made spring-wired cage and a tame decoy bird. These traps are sold at most bird stalls for a couple of dollars, making bird trapping an inexpensive and financially attractive proposition to many people. Bird trappers also take many nestlings which are sold on to bird traders for hand rearing. These birds command a higher price as they are easier to care for and are usually tame. Magpie-robins, Pied Bushchats, Oriental Skylarks, mynas and parakeets are often taken as nestlings and in the breeding season dealers' cages may contain hundreds of these young birds.

With the rise in living standards and increasing affluence in Vietnam's cities, especially Ho Chi Minh City, keeping cage birds is growing in popularity. Although domestic cage birds like Budgerigars *Melopsittacus undulatus* and Canaries *Serinus canaria* are now available, the demand for native songbirds is still enormous. Just what effect this trade will have on wild bird populations is unclear, but many visitors remark on the lack of birds in the Vietnamese countryside. Today birds are also taken for the cooking pot in rural areas and it is common to see youngsters with air rifles shooting at them. The rapidly decreasing natural habitats in Vietnam, coupled with the ever-increasing demand for birds for the cage bird trade, means that bird populations are bound to suffer in the long term.

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Table 1 Species recorded¹ at Le Hong Phong and Thuan Kieu Markets 1991–1997

Cattle Egret <i>Bubulcus ibis</i>	4	Brown Shrike <i>Lanius cristatus</i>	1
Lesser Adjutant <i>Leptoptilos javanicus</i>	2	Magpie-robin <i>Copsychus saularis</i>	80
Lesser Whistling-duck <i>Dendrocygna javanica</i>	6	White-rumped Shama <i>C. malabaricus</i>	100
Shikra <i>Accipiter badius</i>	6	Plumbeous Redstart <i>Rhyacornis fuliginosus</i>	1
Black Kite <i>Milvus nigrans</i>	2	Pied Bushchat <i>Saxicola caprata</i>	200
Silver Pheasant <i>Lophura nycthemera</i>	3	Large Scimitar Babbler <i>Pomatorhinus hypoleucos</i>	2
Green Peafowl <i>Pavo muticus</i>	2	White-crested Laughingthrush <i>Garrulax leucolophus</i>	50
Purple Swamphen <i>Porphyrio porphyrio</i>	6	Lesser Necklaced Laughingthrush <i>G. monileger</i>	10
Common Coot <i>Fulica atra</i>	2	Black-throated Laughingthrush <i>G. chinensis</i>	60
Spotted Dove <i>Streptopelia chinensis</i>	200	Hwamei <i>G. canorus</i>	80
Thick-billed Green Pigeon <i>Treron curvirostra</i>	10	Silver-eared Mesia <i>Leiothrix argentatus</i>	50
Alexandrine Parakeet <i>Psittacula eupatria</i>	10	Red-billed Leiothrix <i>L. lutea</i>	60
Red-breasted Parakeet <i>P. alexandri</i>	30	Blue-winged Minla <i>Minla cyanouroptera</i>	2
Blossom-headed Parakeet <i>P. roseata</i>	50	Little Pied Flycatcher <i>Ficedula westermanni</i>	2
Vernal Hanging Parrot <i>Loriculus vernalis</i>	6	Tickell's Blue Flycatcher <i>Cyornis tickelliae</i>	15
Eurasian Cuckoo <i>Cuculus canorus</i>	1	Great Tit <i>Parus major</i>	20
Asian Koel <i>Eudynamys scolopacea</i>	1	Copper-throated Sunbird <i>Nectarinia calcostetha</i>	10
Greater Coucal <i>Centropus sinensis</i>	10	Crimson Sunbird <i>Aethopyga siparaja</i>	60
White-throated Kingfisher <i>Halcyon smyrnensis</i>	6	Streaked Spiderhunter <i>Arachnothera magna</i>	1
Indian Roller <i>Coracias benghalensis</i>	3	Chestnut-flanked White-eye <i>Zosterops erythropleura</i>	20
Hoopoe <i>Upupa epops</i>	6	Oriental White-eye <i>Z. palpebrosa</i>	400
Oriental Pied Hornbill <i>Anthracoceros albirostris</i>	1	Scaly-breasted Munia <i>Lonchura punctulata</i>	600
Blue-winged Pitta <i>Pitta moluccensis</i>	2	Chestnut Munia <i>L. malacca</i>	20
Oriental Skylark <i>Alauda gulgula</i>	100	Eurasian Tree Sparrow <i>Passer montanus</i>	200
Small Minivet <i>Pericrocotus flammeus</i>	6	Baya Weaver <i>Ploceus philippinus</i>	10
Long-tailed Minivet <i>P. ethologus</i>	1	Vinous-breasted Starling <i>Sturnus burmannicus</i>	50
Scarlet Minivet <i>P. flammeus</i>	20	Common Myna <i>Acridotheres tristis</i>	500
Red-whiskered Bulbul <i>Pycnonotus jocosus</i>	60	Hill Myna <i>Gracula religiosa</i>	6
Black-crested Bulbul <i>P. melanicterus</i>	6	Black-naped Oriole <i>Oriolus chinensis</i>	5
Red-vented Bulbul <i>P. cafer</i>	4	Black-hooded Oriole <i>O. xanthornus</i>	30
Sooty-headed Bulbul <i>P. aurigaster</i>	6	Black Drongo <i>Dicrurus macrocercus</i>	4
Blue-winged Leafbird <i>Chloropsis cochinchinensis</i>	50	Red-billed Blue Magpie <i>Urocissa erythrorhyncha</i>	6
Golden-fronted Leafbird <i>C. aurifrons</i>	40	Green Magpie <i>Cissa chinensis</i>	4
Orange-bellied Leafbird <i>C. hardwickii</i>	20	Rufous Treepie <i>Dendrocitta vagabunda</i>	4
Asian Fairy Bluebird <i>Irena puella</i>	4		

1 Numbers refer to maximum individuals observed during any one visit

Nakai-Nam Theun: can development save one of South-East Asia's last wildernesses?

Nam Theun 2, a major hydropower development proposal, has focused attention on an important protected area which might hold the key to conserving some of the rarest and most highly threatened species of birds and mammals in South-East Asia. This article summarises the significance of Nakai-Nam Theun National Biodiversity Conservation Area in central Laos, sketches recent developments in the hydropower project, and looks to the future.

Introduction

Laos is a land-locked country separated from Vietnam by the Annamite mountains, an isolated range that is covered in several areas by huge tracts of relatively undisturbed montane evergreen forest. The largest of these, one of the most pristine wildernesses remaining in South-East Asia, is largely encompassed within Nakai-Nam Theun National Biodiversity Conservation Area (NBCA). A series of surveys conducted since 1994 by the co-operative programme of the Wildlife Conservation Society (WCS), the Centre for Protected Areas and Watershed Management (CPAWM) of the Lao Department of Forestry, and the World Conservation Union (IUCN) have revealed that the area has an extremely high biodiversity conservation value. Plans to develop a \$2 billion hydropower project along the major river draining the area (the Nam Theun) have generated considerable controversy and promoted intensive research into the likely effects of such a development. Some of this research has been directed towards identifying appropriate mitigation for the damage that will inevitably be caused to the environment if a dam is built.

Nakai-Nam Theun covers approximately 3,445 km² of the Annamite mountains and the adjacent Nakai Plateau in the provinces of Khammouane and Bolikhamxay. A proposed northern extension along the Vietnam border in Bolikhamxay would link Nakai-Nam Theun to the Nam Chouan proposed NBCA, and a minor southern extension would make the area contiguous with Hin Namno NBCA, a bizarre karst landscape of limestone hills and one of the most important sites for primate conservation in Indochina.¹ A third proposed corridor would annex the Khammouane Limestone NBCA to the west. These potential additions expand the size of the protected area to nearly 5,000 km², encompassing altitudes between 400 m and 2,700

m and a broad variety of habitats and species assemblages.² The potential result is a composite of seven protected areas bridging an international border: in Vietnam, Pu Mat, Vu Quang and Phong Nha reserves, and in Laos, Nam Chouan, Hin Namno and Khammouane Limestone NBCAs, with the hub of these being Nakai-Nam Theun. If managed wisely and effectively, this 'super-reserve' would rank amongst the most important sites for biological and cultural conservation in the world.²

Habitat

The area is described in detail by Evans and Timmins³ and IUCN.² Semi-evergreen forest, deciduous dipterocarp forest and stands of pine are all found on the Nakai Plateau (now heavily deforested by salvage logging prior to the planned inundation of the c. 450 km² reservoir area) and in the Annamite foothills to the east, grading into more exclusively evergreen forests as the land rises towards the Vietnamese border. Higher still, huge areas of montane fagaceous forest cloak the slopes, interspersed with patches of *Fokienia hodginsii*, a commercially valuable cypress-like conifer. On mountain-tops and above c. 2,000 m the fagaceous forest gives way to more stunted, rhododendron-dominated ericaceous cloudforest. A unique feature of Nakai-Nam Theun's proposed northern extension is the 'everwet' forests, found in narrow bands where low-elevation saddles (500–800 m) in the mountain chain enable the Vietnamese north-east monsoon to penetrate across the border, a phenomenon otherwise impeded by higher stretches of the Annamites.

Birds

A total of 405 bird species has been conclusively identified in Nakai-Nam Theun and the adjacent northern extension during a few months fieldwork.^{3,4,5} The final total, if provisional field



Map showing the proposed northern extension to the Nakai-Nam Theun National Biodiversity Conservation Area.

records can be confirmed, will probably exceed 430 species. This is by far the highest avian species richness of any site yet surveyed in Laos and is the highest recorded in a single protected area in South-East Asia despite the relatively brief fieldwork conducted (as comparisons: 318 spp. recorded at Khao Yai National Park and 382 spp. recorded at Doi Inthanon National Park, Thailand; 330 spp. recorded at Bach Ma National Park and 270 spp. recorded at Cat Tien National Park, Vietnam). Of particular importance are no less than 11 Threatened and 27 Near-threatened bird species (Collar *et al.*⁶ Appendix 1 lists these species, several of which are not reported by Evans and Timmins³).

The key to this richness is the topographical and botanical variability already described. Slow-flowing rivers and adjacent forest on the Nakai Plateau provide habitat for scarce species such as White-winged Duck⁷ *Cairina scutulata*, Lesser Fish-eagle *Ichthyophaga humilis*, Pied Falconet *Microhierax melanoleucos* and River Lapwing⁸ *Vanellus duvaucelii*. Mid-altitude river systems are home to Blyth's Kingfisher *Alcedo hercules* and Tawny Fish Owl *Ketupa flavipes*. Lowland/foothill semi-evergreen forest supports populations of many Indochinese specialities including Red-collared Woodpecker *Picus rabieri*, Pale-headed Woodpecker *Gecinulus grantia*, Indochinese Green Magpie *Cissa hypoleuca*, White-winged Magpie

Urocissa whiteheadi and Rufous-throated Fulvetta *Alcippe rufogularis*. The vast expanse of evergreen fagaceous forest provides habitat for Coral-billed Ground Cuckoo *Carpococcyx renauldi*, Green Cochoa *Cochoa viridis*, Red-tailed Laughingthrush *Garrulax milnei* and Rufous-necked Hornbill *Aceros nipalensis* amongst many others. The Beautiful Nuthatch *Sitta formosa* is usually found on the boughs of *Fokienia hodginsii*, while Spectacled Fulvetta *Alcippe ruficapilla*, Whiskered Yuhina *Yuhina flavicollis* and Chestnut-tailed Minla *Minla strigula* are confined to cloud and elfin forest close to the summits of the highest peaks. The 'everwet' forests of the proposed northern extension are a stronghold of Short-tailed Scimitar-babbler *Jabouilleia danjoui* and Crested Argus *Rheinardia ocellata*, with many individuals of the latter species calling from arenas on ridge-tops, often close to new logging roads but always difficult to catch sight of, no matter how cautiously they are approached. Spotted Wren Babbler *Spelaornis formosus* occurs in forested valleys and Jerdon's Bushchat *Saxicola jerdoni* breeds locally in riverine scrub and stands of *Imperata* grassland.

Mammals

Nakai-Nam Theun is perhaps most significant for the important populations of threatened mammals it supports. Asian Elephant *Elephas maximus* and Gaur *Bos gaurus* survive in the area. Approximately nine primate species occur, including three that are Globally Threatened or Data Deficient:⁹ Pygmy Loris *Nycticebus pygmaeus* (provisionally identified, pending research into *Nycticebus* taxonomy in South-East Asia), Douc Langur *Pygathrix nemaeus* (the most important population of the red-shanked form in the world¹⁰) and an as yet unidentified pale-cheeked gibbon of the *Nomascus* subgenus, probably of the form *leucogenys* or *siki* (again, taxonomic relationships in this group remain unclear: Thomas Geissmann *in litt.* 1998). Along just one stretch of incompleting road above the village of Ban Navang, 15 species of carnivore have been recorded, including many rare cats such as Asiatic Golden Cat *Catopuma temminckii*, Marbled Cat *Pardofelis marmorata*, Clouded Leopard *Pardofelis nebulosa* and Tiger *Panthera tigris*.¹¹ On the basis of current, admittedly patchy, knowledge, the NBCA emerged as the second most important area in the world outside Madagascar for the conservation of small carnivores.¹²

Most remarkably, several new mammal species have recently been described from the

area. The most distinct of these discoveries is the Saola *Pseudoryx nghetinhensis*.^{13,14} To date, this extraordinary long-horned bovid has evaded biologists in the wild but several have been captured or killed by villagers in Nakai-Nam Theun and the proposed northern extension.^{15,16} It is known only from the central Annamites of Laos and Vietnam, and Nakai-Nam Theun possibly contains the most viable population of the species in a legally protected area.⁵ Another newly described large mammal, the Giant Muntjac *Megamuntiacus vuquangensis*,¹⁸ occupies a restricted world range centred around this region.^{17,18,19} A small dark muntjac, possibly the recently described *Muntiacus truongsongensis*,²⁰ also occurs in less disturbed tracts of montane evergreen forest in the area. Furthermore, a distinctive forest rabbit found in the area (probably *Nesolagus* sp.) awaits formal description (R. J. Timmins *in litt.* 1997), and the Indochinese Warty Pig *Sus bucculentus* was recently rediscovered in the area²¹ after being considered extinct.²² These findings have focused much popular attention on the region,^{23,24,25,26} showing it to be inadequately studied but confirming its status as a critical area for conservation. In conclusion, it cannot be stressed emphatically enough that the species richness and conservation importance of the mammal community at Nakai-Nam Theun is truly exceptional, surpassing almost all other protected areas in South-East Asia.

Conservation and the future

If adequately protected, Nakai-Nam Theun will support vital populations of many rare species that are threatened with extinction both regionally and globally. Alongside an outstanding biological heritage, the reserve contains a remarkable diversity of ethno-linguistic groups, some of whom face imminent extinction themselves.² Whether the Nam Theun 2 hydropower project goes ahead or not, long-term protection of the area requires urgent and concerted effort. The site should form an integral component of a conservation strategy for the Annamite chain as a whole, especially as it could, and should, create a link between several disparate protected areas. Legal protection of the proposed corridor areas and recognition of Nakai-Nam Theun as a world heritage site under the UNESCO World Heritage Convention² would be appropriate and richly deserved steps in the right direction.^{2,5,15}

The Nam Theun 2 project has stimulated and financed a series of important ecological studies

in Nakai-Nam Theun NBCA since 1995, resulting in our current knowledge and a comprehensive management plan for the area.² It also proposes to fund local conservation action for several decades with a portion of profits accrued through the sale of electricity. However, the optimistic implications of this potential funding are counterbalanced by the absence of any precedent amongst hundreds of comparable development projects around the world: despite frequent promises to the contrary, it is difficult to cite a single example of hydropower development positively influencing biodiversity conservation. In essence, Nam Theun 2 will destroy one recently outstanding area and facilitate access to another. The resultant degradation is likely to be painfully predictable, no matter how many millions of dollars are poured into preventing it. The major difficulty facing conservationists in Laos is not money. As Berkmüller *et al.*²⁷ state, 'low skill levels, limited motivation and insufficient institutional capacity pose greater constraints to management implementation than funding'. Nevertheless, given the 'dam scenario' an opportunity presents itself, however elusively, for development and conservation to work in tandem for the benefit of the Lao people and their environment. Whether this opportunity is grasped, or whether the profits are enjoyed exclusively in the corporate and political sectors, remains to be seen.

Recently, another twist has developed in the tale: the Asian economic crisis has undermined the financial security of the hydropower project. In particular, doubts have been raised regarding the ability of Thailand, theoretically the sole recipient of Nam Theun 2's power, to afford the electricity generated by the dam. This has resulted in further delays while the World Bank deliberates over its approval of the project. While this uncertainty continues, the prospects for sustained conservation in Nakai-Nam Theun are clouded. This is partly because the project has unwittingly discouraged bilateral conservation donors and delayed the 'no dam scenario' conservation process. Meanwhile, an eight-month phase of further surveys and management activities commenced in May 1998, conducted under the auspices of the Lao government, the World Bank, IUCN and WCS, with the aim of initiating some of the measures recommended in the 1997 management plan.

Hydropower development aside, pressures imposed by logging interests, road development, very high human population growth and intense



1. The seldom photographed Blyth's Kingfisher *Alcedo hercules* (Photo J. Tobias)
2. Rusty-capped Fulvetta *Alcippe dubia* (Photo P. Davidson)
3. Phou Chomvoy from upper Nam Pan, the proposed northern extension to Nakai-Nam Theun (Photo J. Tobias)

4. Red-tailed Laughingthrush *Garrulax milnei*, a characteristic skulking species of the forest (Photo P. Davidson)
5. Red-tailed Minla *Minla ignotincta* (Photo J. Tobias)
6. Coral-billed Scimitar-Babbler *Pomatorhinus ferruginosus* (Photo J. Tobias)

hunting also loom menacingly over the future of Nakai-Nam Theun and its inhabitants.^{2,15} Another particularly damaging and intractable problem is the incursion of Vietnamese poachers and wildlife salesmen across the remote international border.^{2,5,28} Their principal intention is to harvest or purchase species used in traditional medicine, a trade which is stripping the border area (and indeed much of South-East Asia) of turtles and pangolins, and rapidly reducing populations of many other species of global conservation importance such as Crested Argus and Douc Langur. Recently, the Vietnamese and Lao governments have taken commendable steps to solve this problem by convening jointly to discuss biodiversity conservation issues along the shared border,²⁸ but as yet there has been insufficient direct action to prevent poaching and trading of wildlife. To be successful, a conservation strategy for the area must effectively address each of these problems in turn.

As Laos gradually opens its borders, the prospect of birders visiting the country improves. In fact, there has been some discussion of developing Nakai-Nam Theun as a destination for 'eco-tourists'.² Any naturalist overcoming the troublesome logistics of visiting this wonderful and unique area will be handsomely rewarded — that is, of course, if the magnificent forests of the watershed can be preserved.

Acknowledgements

Our field surveys would not have been possible without the cooperation of CPAWM and its staff (especially Chantaviphone Inthavong, Venevongphet, Xanxai Souliyakane, Sivannavong Sawathvong and Boonhom Sounthala), the Science, Technology and Environment Organisation (STENO) of the Lao Prime Minister's Office (especially Noulun Sinbandith and Madame Monemany Nhoybouakong) and IUCN, especially the Lao country representative, Stuart Chape. Locally, we have received generous assistance from the Provincial Agriculture and Forestry Offices of Khammouane and Bolikhamxay Provinces. Many others made valuable contributions to fieldwork, report writing, early drafts of this manuscript and our dubious sanity in general, especially Will Duckworth, Tom Evans, Jim Jarvie, Khamkhoun Khounboline, Sinaun Phommachak, Khounmee Salivong, Rob Timmins, Robert Tizard, Chantavi Vongkhamheng and Dick Watling.

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Appendix Birds of conservation significance recorded in the Nakai-Nam Theun area (threat categories according to Collar *et al.*,⁶ taxonomy and nomenclature following Inskipp *et al.*²⁹).

Threatened species	
Greater Spotted Eagle	<i>Aquila clanga</i>
Siamese Fireback	<i>Lophura diardi</i>
White-winged Duck	<i>Cairina scutulata</i>
Crested Argus	<i>Rheinardia ocellata</i>
Wood Snipe	<i>Gallinago nemoricola</i>
Blyth's Kingfisher	<i>Alcedo hercules</i>
Rufous-necked Hornbill	<i>Aceros nipalensis</i>
Red-collared Woodpecker	<i>Picus rabieri</i>
Grey-sided Thrush	<i>Turdus feae</i>
Short-tailed Scimitar Babbler	<i>Jabouilleia danjoui</i>
Beautiful Nuthatch	<i>Sitta formosa</i>
Near-threatened species	
Von Schrenk's Bittern	<i>Ixobrychus eurhythmus</i>
Jerdon's Baza	<i>Aviceda jerdoni</i>
Lesser Fish Eagle	<i>Ichthyophaga humilis</i>
Pied Falconet	<i>Microhierax leucopterus</i>
Grey-headed Lapwing	<i>Vanellus cinereus</i>
Yellow-vented Pigeon	<i>Treron seimundi</i>
White-bellied Pigeon	<i>Treron sieboldi</i>
Coral-billed Ground Cuckoo	<i>Carpococcyx renauldi</i>
Spot-bellied Eagle Owl	<i>Bubo nipalensis</i>
Tawny Fish Owl	<i>Ketupa flavipes</i>
Brown Hornbill	<i>Anorrhinus tickelli</i>
Blue-rumped Pitta	<i>Pitta soror</i>
Swinhoe's Minivet	<i>Pericrocotus cantonensis</i>
Green Cochoa	<i>Cochoa viridis</i>
Jerdon's Bushchat	<i>Saxicola jerdoni</i>
Grey Laughingthrush	<i>Garrulax maesi</i>
Red-tailed Laughingthrush	<i>Garrulax milnei</i>
Spotted Wren Babbler	<i>Spelaeornis formosus</i>
Spectacled Fulvetta	<i>Alcippe ruficapilla</i>
Rufous-throated Fulvetta	<i>Alcippe rufogularis</i>
Lesser Rufous-headed Parrotbill	<i>Paradoxornis atrosuperciliaris</i>
Black-breasted Thrush	<i>Turdus dissimilis</i>
Yellow-vented Warbler	<i>Phylloscopus cantator</i>
Fujian Niltava	<i>Niltava davidi</i>
Japanese Paradise-flycatcher	<i>Terpsiphone atrocaudata</i>
White-winged Magpie	<i>Urocissa whiteheadi</i>
Indochinese Green Magpie	<i>Cissa hypoleuca</i>

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Pete Davidson and William Robichaud, Wildlife Conservation Society, P.O. Box 6712, Vientiane, Laos.

Status and distribution of hornbills in Thailand

“A creature of such bizarre and extravagant appearance it seems less a living being than the product of some feverish Oriental fantasy. One of the world’s great natural treasures and at the same time one of nature’s supreme oddities, it is that species of bird to which ornithologists have given the name *Buceros bicornis*: the Great Hornbill” Richard Ives.

Pilai Poonswad began studying hornbills in Thailand after she became fascinated by them while acting as a guide to a BBC film crew in Khao Yai National Park when working on a documentary film entitled *Fig Feast in Khao Yai*. With Atsuo Tsuji she started to document the life of these birds and together they have spent more than 20 years studying this unique family. At first very little was known about hornbills and Pilai began her research by observing a Great Hornbill feeding in a fig tree and then, with the help of an assistant, tracing it back to its nest site. Now, hundreds of hornbill nests have been recorded and research sites have been set up to study the life history of these wonderful birds. Pilai’s work has culminated with the organisation of the First International Asian Hornbill Workshop in 1992 and the Second International Asian Hornbill Workshop in 1996. Both were held in Thailand. The proceedings of the first workshop were published¹ in a *Manual to the Conservation of Asian Hornbills* and the proceedings of the Second Workshop, *The Asian Hornbills: Ecology and Conservation*, are in preparation and will be available soon.

Of the 31 Asian hornbill species (out of a world total of 54 species), 13 have been recorded in Thailand (Table 1).² In Asia, hornbills mainly live

in monsoon evergreen forests or rainforests and their distribution and 1997 estimated population sizes in Thailand are indicated in Maps 1–4.

Hornbills nest in cavities in living trees such as *Dipterocarpus* sp. and *Syzygium* sp. They are unable to excavate their own nest holes and they must find available cavities, indeed, the availability of nesting cavities of an appropriate size is one of the population limiting factors. In Thailand hornbills begin searching for nest sites at the end of the monsoon season, in December or January. The male will locate a possible nest cavity and invite the female to inspect. Once she is satisfied with the choice of nest site, copulation occurs nearby. The female then seals herself inside the nest chamber using clay, rotten wood, regurgitated food and other materials supplied by the male. It usually takes three to seven days to complete this sealing process. The female lays her eggs, incubates them and then rears the chick inside the nesting cavity, the entire nesting process taking from three to four months. During this time the male feeds the female and later on supports the chicks as well. (Tickell’s and Austen’s) Brown, Bushy-crested and White-crowned Hornbills employ a co-operative breeding strategy. This means they have nest helpers, usually yearlings of the same family, to assist with the feeding of the female and the chicks.

Hornbill studies are being carried out at several sanctuaries. The list below gives some

Status of hornbills in Thailand

English Name / Scientific Name		Status
Oriental Pied Hornbill	<i>Anthracoceros albirostris</i>	Common
Black Hornbill	<i>Anthracoceros malayanus</i>	Thr-ext (?)*
Rhinoceros Hornbill	<i>Buceros rhinoceros</i>	Endangered
Great Hornbill	<i>Buceros bicornis</i>	Vulnerable
Helmeted Hornbill	<i>Buceros vigil</i>	Endangered
(Tickell’s) Brown Hornbill	<i>Anorrhinus (tickelli) tickelli</i>	Vulnerable
(Austen’s) Brown Hornbill	<i>Anorrhinus (tickelli) austeni</i>	Vulnerable
Bushy-crested Hornbill	<i>Anorrhinus galeritus</i>	Vulnerable
White-crowned Hornbill	<i>Aceros comatus</i>	Vulnerable
Rufous-necked Hornbill	<i>Aceros nipalensis</i>	Endangered
Wrinkled Hornbill	<i>Aceros corrugatus</i>	Endangered
Wreathed Hornbill	<i>Aceros undulatus</i>	Vulnerable
Plain-pouched Hornbill	<i>Aceros subruficollis</i>	Endangered
*Threatened-extinct (?)		

Huai Kha Khaeng Wildlife Sanctuary (World Heritage Site)

Species	Est. population (1997)	No. of breeding records (nests) in 1997
Oriental Pied Hornbill	ND	8
Great Hornbill	ND	3
(Tickell’s) Brown Hornbill	ND	6
White-crowned Hornbill	Not confirmed	ND
Rufous-necked Hornbill	ND	10
Wreathed Hornbill	ND	ND
Plain-pouched Hornbill	ND	3
(ND = No Data)		

indication of the work being carried out and the population sizes and species present.

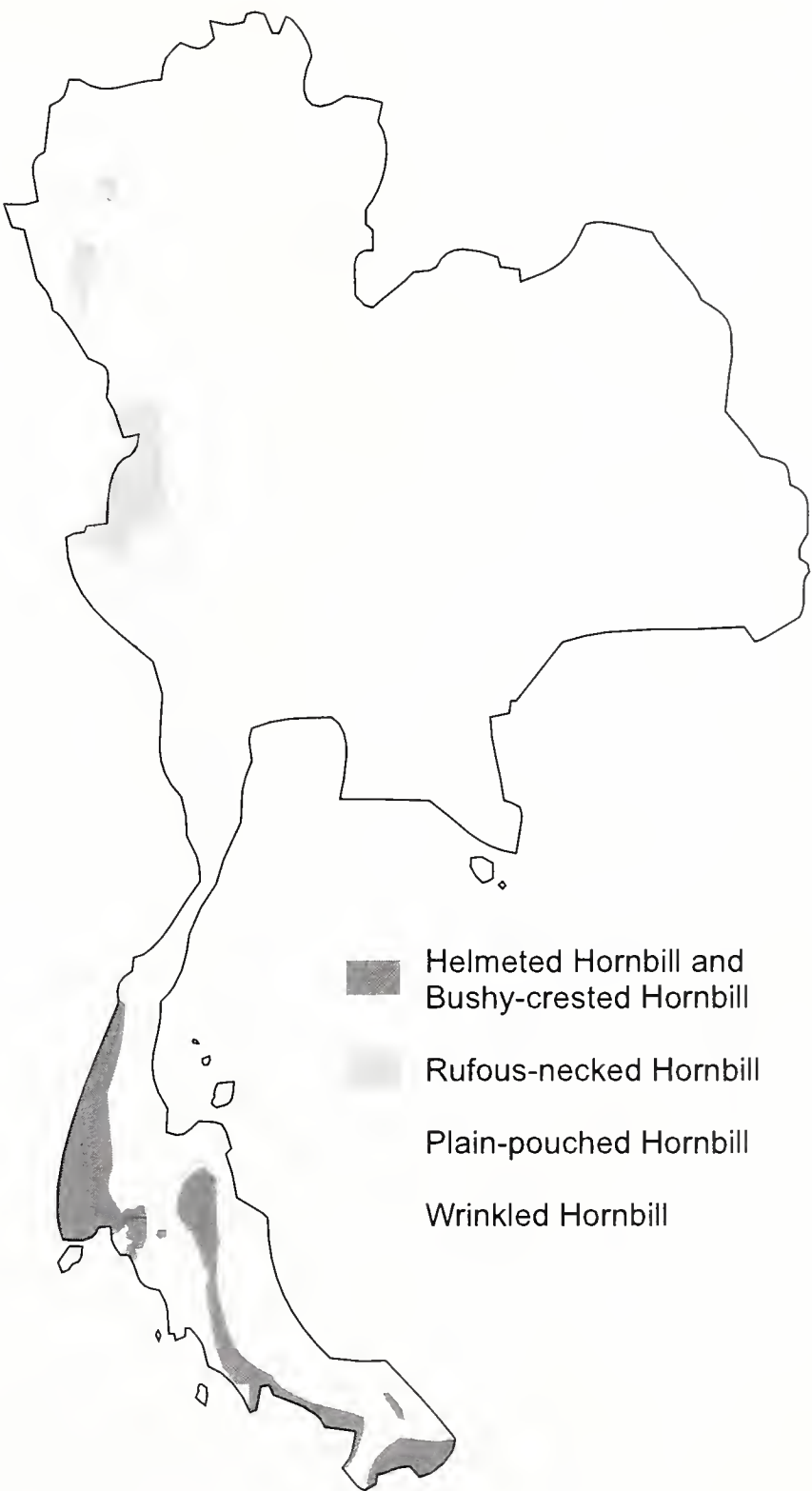
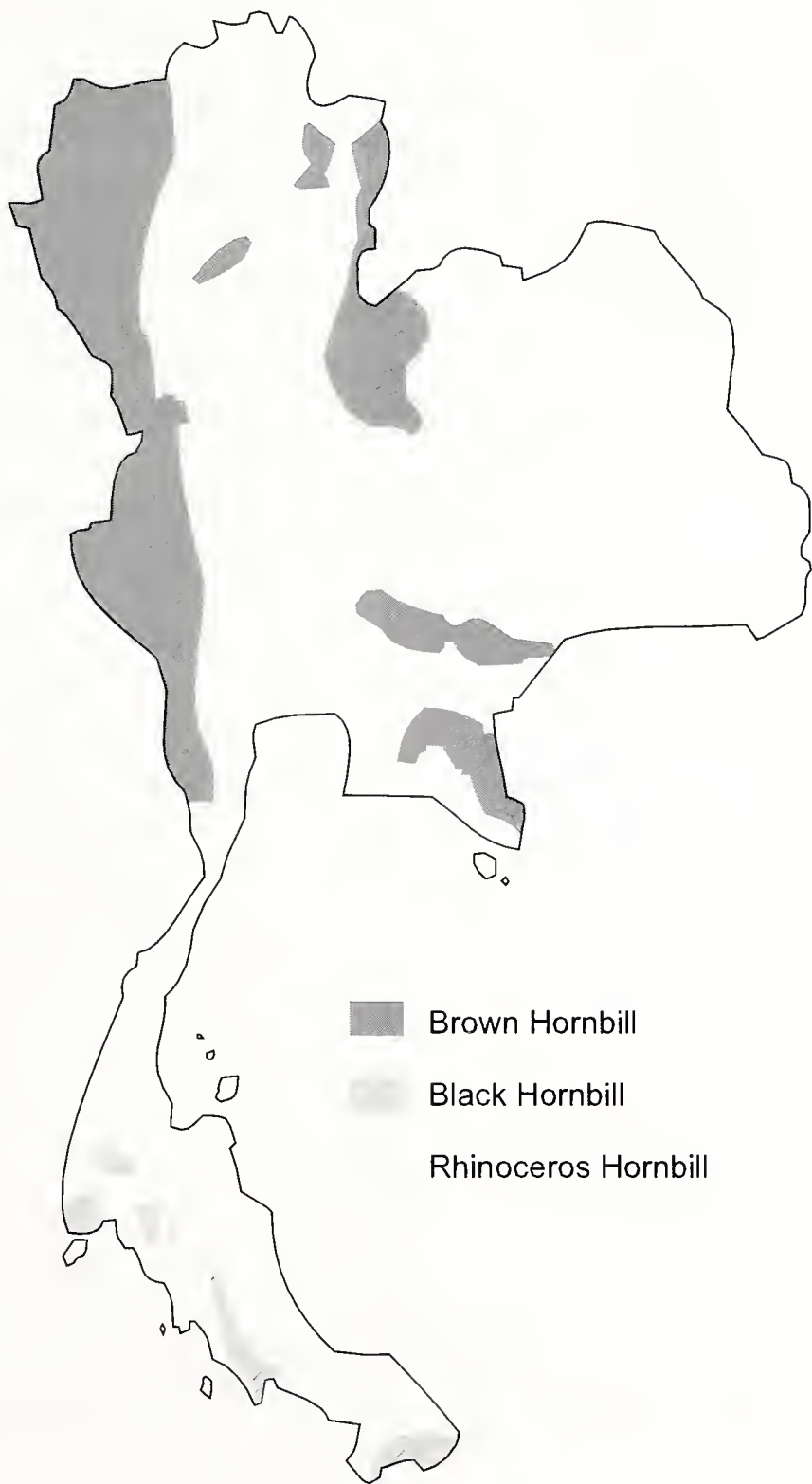
Huai Kha Khaeng Wildlife Sanctuary is situated in western Thailand and covers some 2,800 km². Habitat types are diverse, comprising 47% tropical evergreen forest, 43% mixed deciduous forest, 6% dry dipterocarp forest, 3.5% mixed deciduous scrub and bamboo, and small areas of old clearings, non-forest and open water.³ Hornbill studies in this area have been carried out since 1990, and intensively since 1992. There are two study sites, the first of around 100 km² at Nong Ma along the Huai Kha Khaeng river and the second of about 50 km² at Khao Nang Ram/ Khao Khieo. Currently there is a Woodpecker Study Project being conducted at Nong Ma which

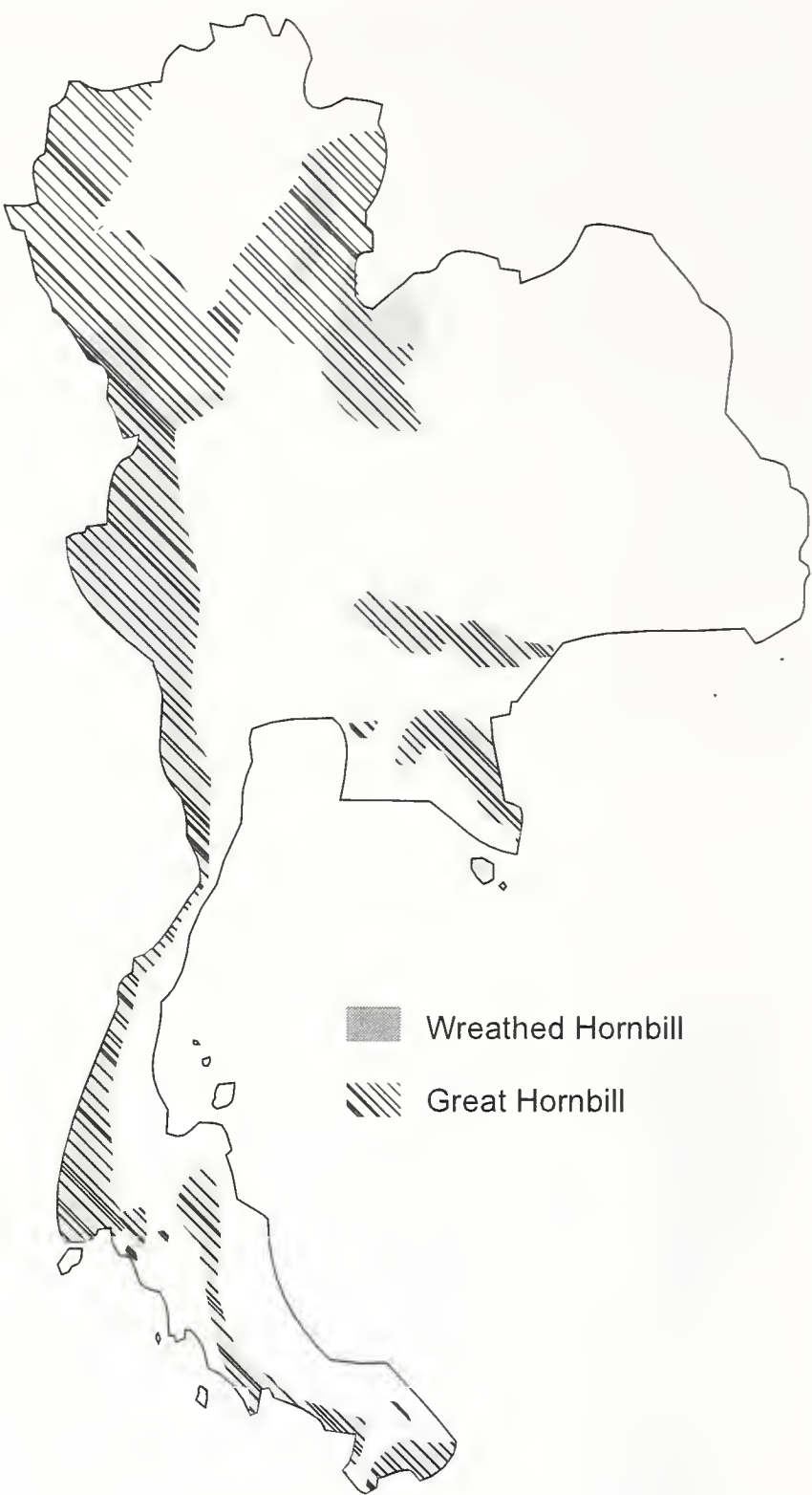
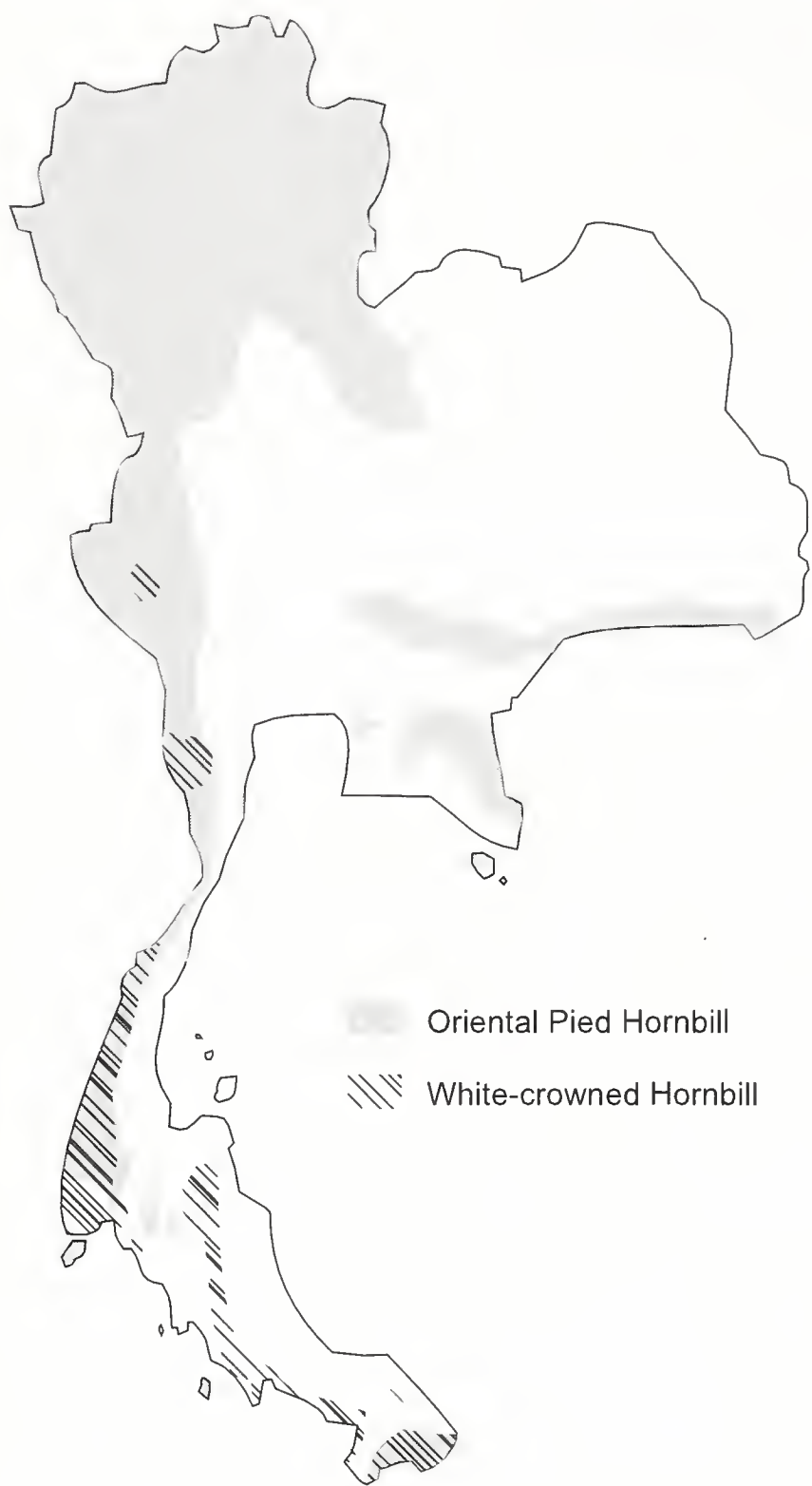
Khao Yai National Park

Species	Est. population (1997) (in non-breeding season)	No. of breeding records (nests) in 1997
Oriental Pied Hornbill	1000	16
Great Hornbill	1000	19
(Austen's) Brown Hornbill	500	3
Wreathed Hornbill	1500	9
(ND = No Data)		

is focusing on the importance of woodpeckers in generating suitable nest holes for hornbills.

Intensive hornbill research has been conducted at Khao Yai National Park since 1980. The study area is around 70 km² and contains 60 km² of forest and 10 km² grassland in the north-





west sector the park. The habitat is mainly wet evergreen forest lying between 400 and 1,060 m. Dr Pilai Poonswad has estimated the population of hornbills in the study area as six per km². The population of Oriental Pied Hornbills is relatively small in the study area because it is heavily forested and this is usually a forest edge species.

The estimated population of Wreathed Hornbills for the whole of Khao Yai National Park is 1,500 individuals, for Oriental Pied Hornbill about 1,000, for Great Pied fewer than 1,000 and for (Austen’s) Brown Hornbill fewer than 500 individuals.

Budo and Hala-Bala is located at the southern tip of Thailand, close to the Malaysian border. Both are newly protected areas and were, until

Budo and Hala-Bala (Narathiwat-Pattani-Yala area)

Species	Est. pópulation (1997)	No. of breeding records (nests) in 1997
Black Hornbill	ND	1*
Rhinoceros Hornbill	ND	19
Great Hornbill	ND	41
Helmeted Hornbill	ND	9
Bushy-crested Hornbill	ND	8
White-crowned Hornbill	ND	2
Wrinkled Hornbill	7	1
Wreathed Hornbill	ND	5
Plain-pouched Hornbill	300	ND

(largest count of one flock)
(ND = No Data) * record not confirmed

recently, controlled by Muslim separatists. Even now they are not always considered safe. Studies in this area began in 1994 and the ongoing research is concentrating on nesting records. Hornbills here are severely threatened because the local villagers are poaching the chicks to sell as pets or to eat them.

Threats to hornbills and future conservation of hornbills

Hornbill populations are declining. The major threat is from rapid loss of habitat through deforestation, but hornbills are also threatened by poaching of chicks for food and for the illegal wildlife trade. Animal traders are willing to pay large sums of money for hornbill chicks. Poaching of chicks is considered to be an important threat in southern Thailand.

The Hornbill Research Foundation has set up a Hornbill Family Adoption Program. This aims to raise funds to provide extra income for villagers to protect any nesting hornbills they find and collect data on them. For details of how to adopt a hornbill family, please contact the Hornbill Research Foundation, c/o Department of Microbiology, Faculty of Science, Mahidol University, Rama 6 Road, Bangkok 10400, Thailand. Tel. +66 2 246 3026 ext. 4606, fax 66 2 644 5411, e-mail scpps@mucc.mahidol.ac.th

Acknowledgements

The author is grateful to Dr Pilai Poonswad for providing the data for this article. Without her dedication, determination and hard work, this information may never have been collected. The author also thanks Vijak Chimchome, Boonma Seangthong, Adisak Vidhidharm, Sudjai Nuttaro, Narong Jirawatkavi, Siriwan Nakkhuntod, Kamol Plongmai, Phitaya Chuailua, Preeda Thiensongrassamee, Panya Suksomkit, Rungsrit Kanjanvanit for their work and support. Without them, the amount of research would have been far less. Many people have helped the Hornbill Project Thailand and the Hornbill Research Foundation over the years and the Royal Forest Department Thailand has for many years supported the Hornbill Project. We are grateful to them all for their assistance.

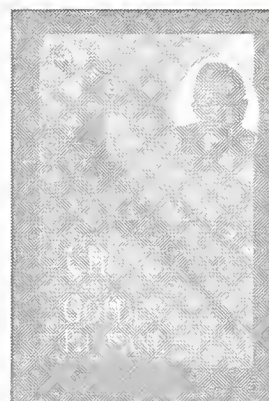
The Third International Asian Hornbill Workshop will be held in April/May 2000 in Singapore. For details, see the *Stray Feathers* section of this Bulletin.

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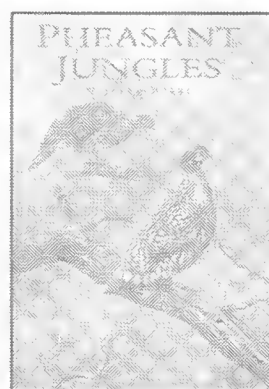
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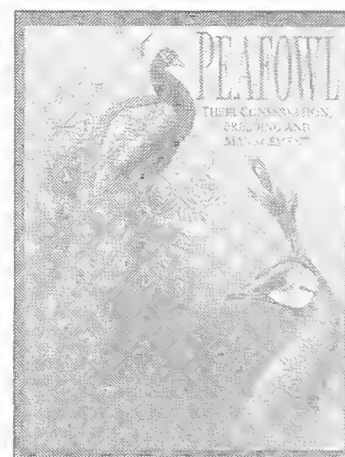
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1. Rufous-necked Hornbill *Aceros nipalensis*, a species found in western Thailand (Photo Morten Strange)
2. Helmeted Hornbill *Buceros vigil*, one of the most spectacular of all the hornbills (Photo Adisak Vidhidharm)
3. Austen's Brown Hornbill *Anorrhinus (austeni) tickelli* (Photo Atsuo Tsuji)
4. Plain-pouched Hornbill *Aceros subruficollis*, a rarely photographed forest species (Photo Pilai Poonswad)
5. Tickell's Brown Hornbill *Anorrhinus (tickelli) tickelli*, which many authorities now consider a full species (Photo Amorn Linkeeratiyntkul)
6. A brochure produced by the Hornbill Research Foundation to promote awareness of this family of birds in Thailand



1. Woolly-necked Stork *Ciconia episcopus*, a species frequently observed at Rawa Aopa National Park (Photo Tim Loseby)
2. Blue-tailed Bee-eater *Merops philippinus* a common migrant to Sulawesi (Photo Tim Loseby)
3. Maroon-backed Whistler *Coracornis raveni*, a skulking endemic species in Sulawesi (Photo J. Ekstrom)
4. Dark-eared Myza *Myza celebensis*, one of the two endemic myza species in Sulawesi (Photo J. Ekstrom)
5. Camp 1, just outside Lore Lindu National Park (Photo J. Ekstrom)

Production of this double colour plate
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Birdwatching Areas

Sulawesi



Rawa Aopa Watumohai National Park, south-east Sulawesi

There are a number of well-known areas to watch birds in Sulawesi: Lore Lindu National Park in Central Sulawesi and Bogani-Nani-Wartabone National Park, formerly Dumoga Bone, and Tangkoko Dua Saudara Nature Reserve in North Sulawesi. Until recently south-east Sulawesi had been little visited by ornithologists. Operation Wallacea over the past three years has established that the offshore island of Buton is rich in bird life, and of great ornithological interest. Little known, however, is Rawa Aopa Watumohai National Park, in south-east Sulawesi, another area well worth considering when planning an expedition to the island.

Ujung Pandang, the capital of Sulawesi, is reached by flights from Jakarta or Denpasar, and from Ujung Pandang daily flights are available to Kendari, the provincial capital of south-east Sulawesi. Two hours' drive from Kendari lies the 100,000 ha national park, Rawa Aopa Watumohai. The Watumohai section consists of savanna grasslands, bordered on the coast by mangroves, and includes Gunung Watumohai (Black Rock Mountain in Tolaki), which is rocky, dry and poorly vegetated, harbouring few birds. To the north, in the Rawa Aopa section, are Gunung Makaleleo and Gunung Unggulino, on the upper slopes of which is primary hill forest. The Aopa wetlands extend 25 km east and west of Aopa. Only the upriver section of the wetlands west of Aopa bridge is within the park, but this has the greatest species diversity. Between the two sections of the park is lowland forest, grading to hill forest in the south.

From Kendari, buses run daily through Watumohai, and will drop you off at Lanowulu, where the park office is located. There are two chalets, each with one bedroom ensuite and two bedrooms with external bathroom. There are cooking facilities in one bungalow. Rp 25,000 is charged per person per night. Meals can be provided at Rp 10,000 each if four days' notice is given, but it is better to bring in your supplies. Transport is necessary to travel around this section of the park, although it might be possible to hitch lifts from traffic passing through. Vehicle hire from Kendari would be about Rp 160,000 per day with driver. Self-drive is not recommended.

Buses also run from Kendari to Motohaa, two kilometres from the ranger's post at Aopa where boats may be chartered to birdwatch in the swamps. In the wet season the ranger has a large



Map showing location of Rawa Aopa Watumohai National Park

boat in which he will take you out for Rp 15,000, but when the water level is low it is necessary to hire dugout canoes at Rp 25,000 per hour. At Aopa there are two spartan beds at the ranger's post at Rp 500 per person, and food may be arranged, probably fish! However, for visitors to the wetlands at Aopa and the northern part of the park, Una'aha, one hour's drive away, is a convenient base and there is a comfortable hotel, the Wisata. Guides for Gunung Makaleleo and Gunung Unggulino may be arranged with the Dinas Pariwisata (District Tourist Service) in Una'aha.

Before visiting the park, permits must be obtained from the recently established office of the Taman Nasional Rawa Aopa Watumohai at Una'aha. It has been pointed out to the tourism authorities that this is inconvenient for visitors who wish to travel direct to Lanowulu from Kendari, and it is hoped that Sub-Balai Perlindungan Alam, Jalan Llaute No.7, Kendari

(Tel: (0401) 21133) will again be able to issue permits. The Sub-Balai is in radio contact with Watumohai and Rawa Aopa and could arrange accommodation. For the more adventurous, treks can be arranged from Watumohai to Rawa Aopa. The 80 km trail will take at least five days and encompass forest habitat, which is otherwise inaccessible. Arrangements should be discussed with the officer in charge of the Sub-Balai, with an interpreter, depending on your Indonesian. He can arrange porters, normally two for two trekkers, and provide a guide. Porters would require Rp 10,000 per day and the guide should receive Rp 15,000. Food for yourself, guide and porters is your responsibility and advice can be obtained on what provisions to take from the ranger in Kendari. If in difficulties, contact Pak Suroso, PT Mentari Pesona Nusa, Tours and Travels, Jln. M T Haryono No.18, Kendari (Tel: (0401)27181). He speaks good English and can arrange bookings, permits, transport, and, if necessary, food and cooking arrangements.

The grassy savanna flats at Watumohai are home to hundreds of Javan Rusa deer *Cervus timorensis*, which show little concern for passing vehicles. In late September 1997, Woolly-necked Storks *Ciconia episcopus* were feeding with deer, while Black Eagles *Ictinaetus malayensis* and Spotted Harriers *Circus assimilis* quartered for prey. In August 1998 Woolly-necked Storks and a single Milky Stork *Mycteria cinerea* were recorded at Watumohai, but in 1996 no fewer than 173 Milky Storks were reported on Rawa Aopa. Reported also from the park were Yellow-crested Cockatoo *Cacatua sulphurea*, Blue-faced Rail *Gymnocrex plumbeiventris*, and Lilac-cheeked Cittera *Cittura cyanotis* and Black-billed Kingfishers *Pelargopsis melanorhyncha*.

Fifty-one species of birds were recorded in the Watumohai area in 1998, of which 15 were Wallacean endemics, including Barred Honey Buzzard *Pernis celebensis*, Spotted Kestrel *Falco*

moluccensis, Pygmy Hanging Parrot *Loriculus exilis*, Golden-mantled Racquet-tail *Prioniturus platurus*, Red-knobbed Hornbill *Rhyticeros cassidix* and Purple-winged Roller *Coracias temminckii*.

The swamps at Rawa Aopa were surveyed in a motorised dugout, amongst pandanus reeds and on the open water. Forty-one species were recorded in 1998 on Rawa Aopa and Gunung Unggulino, including Great *Phalacrocorax carbo* and Little Pied Cormorants *P. melanoleucos*, Oriental Darter *Anhinga melanogaster*, Purple Heron *Ardea purpurea*, Black *Ixobrychus flavicollis* and Yellow Bitterns *I. sinensis*, White-browed Crake *Poliolimnas cinerea*, Comb-crested Jacana *Irediparra gallinacea*, Moluccan Swiftlet *Collocalia infuscata*. Rainbow Bee-eater *Merops ornatus*, Caerulean Cuckooshrike *Coracina temminckii* and Sulawesi Crested Myna *Basilornis celebensis*. Woolly-necked Storks are usually common in the swamps, but were not present in August 1998, probably due to the unusually high water level. The ranger recounted that twelve years previously an Australian Pelican *Pelecanus conspicillatus* put in an appearance.

Birding in Sulawesi offers a challenge in organisation and logistics, but these are insignificant compared with the satisfaction of a visit to one of the most exciting ornithological destinations on earth.

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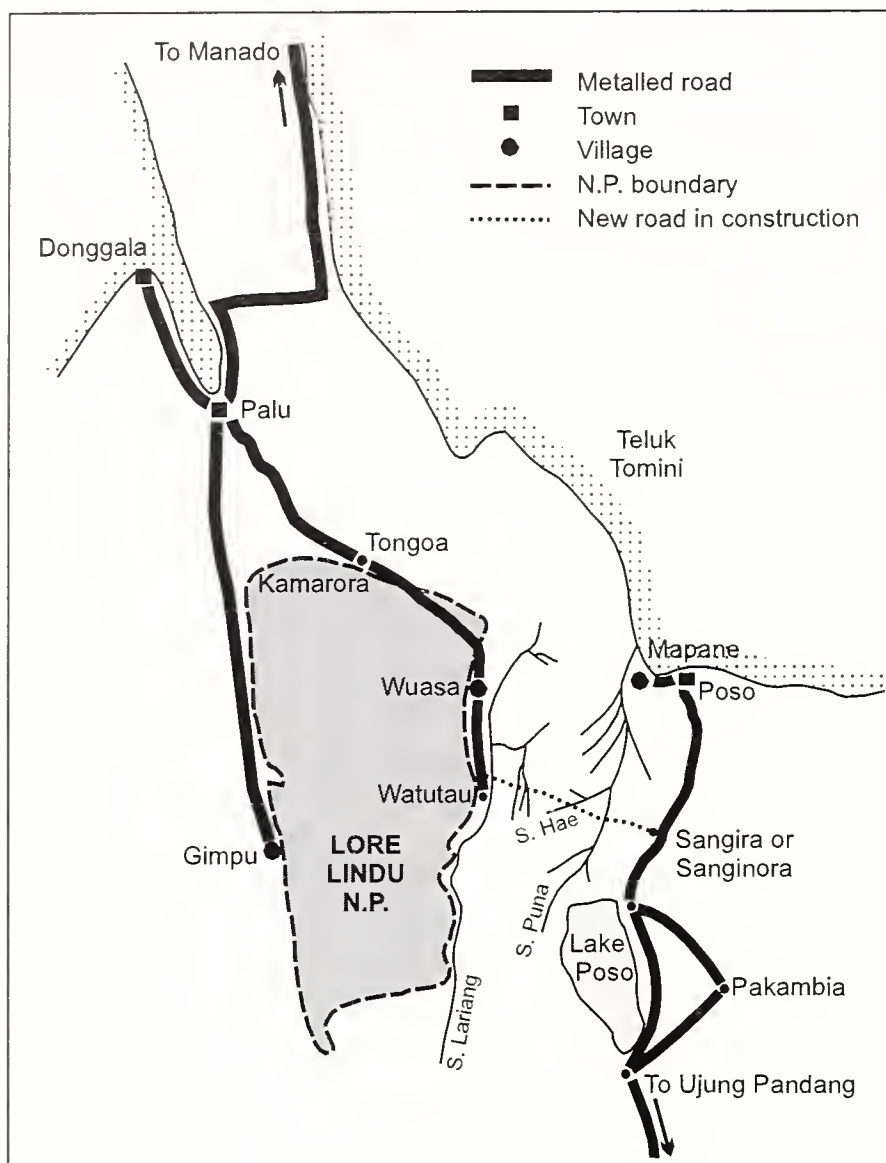
Richard Gregory-Smith, LPO Box A258, Australian National University, Canberra City, ACT 2601, Australia.

Forests at the edge of Lore Lindu National Park, central Sulawesi

An excellent locality for birdwatchers to see many of Sulawesi's stunning endemics exists just outside the eastern boundary of Lore Lindu National Park, along the newly built road between Sangira and Watutau. This article aims to raise awareness of this important site so that perhaps one day it might be included in the National Park.

Most visitors enter Lore Lindu National Park from either Tentena or Palu. A short excursion to the area in September 1996 revealed that it is now

possible to access the park from Poso in the north-east. A *bemo* (small bus) can be found in Poso that goes as far as Sangira (sometimes called



Map showing location of Lore Lindu National Park

Sanginora), a village at the edge of relatively good forest. From here the road is being constructed to Watutau (marked with a dotted line on the sketch map). It was straightforward to hitch-hike on the trucks that travelled between the two road-building camps located along this incipient road; the *Kepala Desa* (village chief) in Sangira was happy to provide us with various rice cakes, the first 'tourists' they had known in the area. However, transport is likely to be more difficult in the rainy season, and landslides might occasionally hinder progress. Accommodation was kindly afforded by the River Hae Camp [at approx. 1,000 m, where the road crosses the River Hae (*Sungai Hae*)] and at the administration centre located further along the road (approx. 20 km). However, future visitors should be self-sufficient, with food and equipment to cover all eventualities. A smattering of Bahasa is important in such a remote area so that logistics can be sorted out.

The terrain is steep and birding from the road affords excellent views into the canopy, where many difficult and elusive endemics occur. Although we only spent two days at this site, we observed 43 endemic species, and it provided higher quality birding than any of the better known sites in the park we visited.

The best birding area was either side of the River Hae camp. Notable finds here included

remarkably large numbers of the normally elusive Purple-bearded Bee-eater *Meropogon forsteni*, which were nesting in the loose banks of earth cut away for the road (giving views down to a couple of metres). They were often seen foraging at eye-level in the canopy. Malia *Malia grata* were noisy and conspicuous at dawn and dusk, with groups of up to 12 individuals foraging in the manner of thick-bodied laughingthrushes on vines and epiphytes beside the road. Citrine Flycatchers *Culicicapa helianthea* were very common, often foraging in mixed flocks with Sulawesi Leaf-warbler *Phylloscopus sarasinorum*, Streaky-headed White-eye *Lophozosterops squamiceps* and Rusty-bellied Fantail *Rhipidura teysmanni*. These flocks were sometimes joined by honeyeaters, both Dark-eared Myza *Myza sarasinorum* and White-eared Myza *Myza celebensis*, the two Sulawesi endemic members. Blue-fronted Flycatchers *Cyornis hoevelli* appeared to be territorial, with several pairs located in the middle and lower storeys along the road.

Sulphur-bellied Whistler *Pachycephala sulfuriventer* was found calling in the middle and upper storeys of the trees, whilst Maroon-backed Whistler *Coracornis raveni* was notably less conspicuous and vocal and showed a preference for the understorey foliage. The third endemic whistler, Yellow-flanked Whistler *Hylocitrea bonensis*, was only found above 2,000 m at a different site (Anaso) – but it is worth searching for here. This species is another endemic, monotypic genus, characteristic of Sulawesi's remarkable avifauna.

Sulawesi Pygmy Woodpecker *Picoides temminckii* was usually found in large, possibly family, groups of up to 12 birds foraging on the smaller branches of tall dead trees; whereas Ashy Woodpecker *Mulleripicus fulvus* foraged in noisy pairs on the main trunks and boughs. The partially nomadic Blue-faced Parrotfinch *Erythrura trichroa* was not uncommon, foraging both in the canopy and in the herb layer of dense forest.

Sulawesi is extraordinary for its endemic raptors, and this site held a good selection with several sightings of Sulawesi Hawk-eagle *Spizaetus lanceolatus* and Sulawesi Serpent-eagle *Spilornis rufipectus* soaring above the forested ridges. Lower down over the forest or within the subcanopy we found Vinous-breasted Sparrowhawk *Accipiter rhodogaster*, and possibly its congener Sulawesi Dwarf Sparrowhawk *A. nanus*; separating these species in the field is very difficult given the views normally obtained. We

also recorded a juvenile of the scarce Rufous-bellied Eagle *Hieraaetus kienerii* – the bird had recently flown the nest and was still clumsy in flight.

Sulawesi Scops Owls *Otus manadensis* were common, judging by the distinctive single whistle given after dark and several sightings from the road of birds calling and flying in the subcanopy. An unknown owl *Ninox* sp. was also heard calling.

Five of Sulawesi's endemic parrots were seen, including the Golden-mantled Racquet-tail *Prioniturus platurus* and the elusive Pygmy Hanging Parrot *Loriculus exilis*, best separated from its more common congener, Sulawesi Hanging Parrot *L. stigmatus*, by its tiny size. Other colourful frugivorous endemics included the stunning White-bellied Imperial Pigeon *Ducula forsteni* and the Red-eared Fruit-dove *Ptilinopus fischeri*; the latter apparently fed on fruits in the subcanopy and mid-storey whereas the imperial pigeon was more often seen flying in fast groups of three to five individuals, or when groups were disturbed from the upper canopy.

Investigations at higher altitudes on the surrounding ridges, or along the river beds and deeper within the forest, would presumably reveal some of the skulking leaf-litter endemics such as the Sulawesi Mountain Thrush *Cataponera turdoides*, Great Shortwing *Heinrichia calligyna*, Geomalia *Geomalia heinrichi*, or even a sought-after rail species. A short period of time in the forest off the road yielded unforgettable views of a Sulawesi Ground Dove *Gallicolumba tristigmata*. This species is indicative of the high quality of the forest here for other ground birds. It seems this tremendous site is bulging with potential, and deserves intense attention from dedicated birders and ecologists in the future. Given the excellent condition of the forest, this site should be more thoroughly surveyed to assess its potential for inclusion within the formal boundaries of Lore Lindu National Park.

Systematic list for 15th and 16th September 1996 on the Sangira to Watutau road.

* = endemic to Sulawesi (inc. offshore islands)

? = Unconfirmed sighting

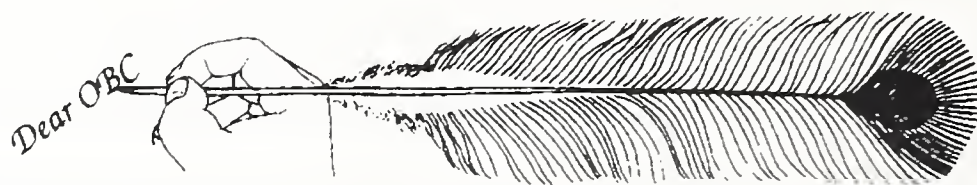
* Sulawesi Serpent-eagle	<i>Spilornis rufipectus</i>
*? Sulawesi Dwarf Sparrowhawk	<i>Accipiter nanus</i>
* Vinous-breasted Sparrowhawk	<i>Accipiter rhodogaster</i>
Rufous-bellied Eagle	<i>Hieraaetus kienerii</i>
* Sulawesi Hawk Eagle	<i>Spizeatus lanceolatus</i>
Barred Buttonquail	<i>Turnix suscitator</i>
Brown Cuckoo Dove	<i>Macropygia amboinensis</i>
* Sulawesi Ground Dove	<i>Gallicolumba tristigmata</i>

* Red-eared Fruit Dove	<i>Ptilinopus fischeri</i>
Superb Fruit Dove	<i>Ptilinopus superbus</i>
* White-bellied Imperial Pigeon	<i>Ducula forsteni</i>
* Grey-headed Imperial Pigeon	<i>Ducula radiata</i>
* Ornate Lorikeet	<i>Trichoglossus ornatus</i>
* Yellow-and-green Lorikeet	<i>Trichoglossus flavoviridis</i>
* Sulawesi Hanging Parrot	<i>Loriculus stigmatus</i>
* Pygmy Hanging Parrot	<i>Loriculus exilis</i>
* Golden-mantled Racquet-tail	<i>Prioniturus platurus</i>
Indonesian Cuckoo	<i>Cuculus sepulchralis</i>
Gould's Bronze Cuckoo	<i>Chrysococcyx russatus</i>
* Fiery-billed Malkoha	<i>Phaenicophaeus calyborhynchus</i>
* Sulawesi Scops Owl	<i>Otus manadensis</i>
Great Eared Nightjar	<i>Eurostopodus macrotis</i>
White-bellied Swiftlet	<i>Collocalia esculenta</i>
Moluccan Swiftlet	<i>Aerodramus infuscatus</i>
Purple Needletail	<i>Hirundapus celebensis</i>
* Purple-bearded Bee-eater	<i>Meropogon forsteni</i>
* Purple-winged Roller	<i>Coracias temminckii</i>
* Red-knobbed Hornbill	<i>Rhyticeros cassidix</i>
* Sulawesi Pygmy Woodpecker	<i>Picoides temminckii</i>
* Ashy Woodpecker	<i>Mulleripicus fulvus</i>
* Caerulean Cuckooshrike	<i>Coracina temminckii</i>
* Pygmy Cuckooshrike	<i>Coracina abbotti</i>
* Sulawesi Cicadabird	<i>Coracina morio</i>
* Malia	<i>Malia grata</i>
Spangled Drongo	<i>Dicrurus bracteatus</i>
Black-naped Oriole	<i>Oriolus chinensis</i>
* Piping Crow	<i>Corvus typicus</i>
* Sulawesi Babbler	<i>Trichastoma celebensis</i>
Golden-bellied Gergone	<i>Gerygone sulphurea</i>
Chestnut-backed Bush Warbler	<i>Bradypterus castaneus</i>
* Sulawesi Leaf-warbler	<i>Phylloscopus sarasinorum</i>
Mountain Tailorbird	<i>Orthotomus cuculatus</i>
Snowy-browed Flycatcher	<i>Ficedula hyperythra</i>
Little Pied Flycatcher	<i>Ficedula westermanni</i>
* Blue-fronted Flycatcher	<i>Cyornis hoevelli</i>
Citrine Flycatcher	<i>Culicicapa helianthea</i>
Island Verditer Flycatcher	<i>Eumyias panayensis</i>
* Rusty-bellied Fantail	<i>Rhipidura teysmanni</i>
* Maroon-backed Whistler	<i>Coracornis raveni</i>
* Sulphur-bellied Whistler	<i>Pachycephala sulfuriventer</i>
* Ivory-backed Woodswallow	<i>Artamus monachus</i>
* Sulawesi Myna	<i>Basilornis celebensis</i>
* Fiery-browed Myna	<i>Enodes erythrophis</i>
* Finch-billed Myna	<i>Scissirostrum dubium</i>
* Dark-eared Myza	<i>Myza celebensis</i>
* White-eared Myza	<i>Myza sarasinorum</i>
Scarlet Honeyeater	<i>Myzomela sanguinolenta</i>
Crimson Sunbird	<i>Aethopyga siparaja</i>
* Yellow-sided Flowerpecker	<i>Dicaeum aureolimbatus</i>
* Crimson-crowned Flowerpecker	<i>Dicaeum nehrkorni</i>
* Grey-sided Flowerpecker	<i>Dicaeum celebicum</i>
Mountain White-eye	<i>Zosterops montanus</i>
Black-fronted White-eye	<i>Zosterops atrifrons</i>
* Streaky-headed White-eye	<i>Lophozosterops squamiceps</i>
Blue-faced Parrotfinch	<i>Erythrura trichroa</i>

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To the Editor



Comments on Singapore records

I would like to comment on the articles in OBC Bulletin 27 on the occurrence of Oriental Cuckoo *Cuculus saturatus*, Besra *Accipiter virgatus* and Aleutian Tern *Sterna aleutica* in Singapore. The 21st October and 2nd December 1995 records of Oriental Cuckoos have been accepted as the first and third records respectively for Singapore by the Records Committee of the Nature Society (Singapore) Bird Group. Similarly, the 26th November 1995 record of Besra has also been accepted as the first Singapore record for this species. Both Besra and Oriental Cuckoo records were accepted on the basis of the excellent descriptions and photographs provided by Peter Kennerley. However, the 15th September 1994 Aleutian Tern record, mentioned on page 40 of *Aleutian Terns in South-East Asia*, has not been accepted as the first record for Singapore because detailed notes required for record authentication have not been submitted to the Records Committee. We would like to urge the observers to do so as soon as possible. Evidence was submitted for the 13th October 1996 record and this will stand as the first Singapore record until documentation is submitted for the 1994 or any earlier records.

Full details of the above records, as well as other new Singapore records for 1995 and 1996, are included in Volumes 2 and 3 of *Iora*, the Nature Society's ornithological journal, which will be published in December 1998.

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Lim Kim Seng, Records Committee, Nature Society (Singapore) Bird Group, c/o Block 644 Yishun Street 61, #12-300, Singapore 760644, fax: 65 7590873.

A possible decline of vultures in India

Of the eight vulture species in the Indian subcontinent, four – Eurasian Griffon *Gyps fulvus*, White-rumped *G. bengalensis*, Long-billed *G. indicus* and Egyptian *Neophron percnopterus* – were formerly abundant on the Indian plains, particularly in north, north-west and central India.¹ Only the Red-headed Vulture *Sarcogyps calvus* was considered uncommon.¹ The Himalayan Griffon *Gyps himalayensis* and Lammergeier *Gypaetus barbatus* are montane species found in the Himalayas.¹ The eighth species, Cinereous Vulture *Aegypius monachus*, is widely distributed in Central Asia but in India it is mainly a winter visitor to the north and north-west (as far as Dhulia district in Maharashtra).¹ Vultures are generally not found in the southern Indian states of Tamil Nadu and Kerala.²

There has been a decrease in vulture numbers in several Asian countries, such as Cambodia, Laos, Vietnam and Thailand, due to direct persecution and a decline in their natural prey. In these countries there is no taboo against eating cows and buffaloes so few carcasses are left. In India, however, the cow is considered sacred: as a result there are literally millions of animals roaming freely about. When a cow dies a natural death, its skin is removed by members of a Hindu subcaste called the *kanjars*, and the carcass is left for the vultures and dogs. Vultures therefore receive an uninterrupted supply of food throughout the year. Indeed it is thought that the near-absence of vultures in southern India is because in Kerala, and parts of Tamil Nadu, the taboo against eating beef is not very strong so few cattle are left for the vultures to feed on.

In the list of Indian near-threatened birds, Collar *et al.*¹ included White-rumped, Long-billed, Red-headed and Cinereous Vultures. In 1995 and 1996 I informed Dr Collar that I believed both White-rumped and Long-billed Vultures were abundant in India and their inclusion in the list of Near-Threatened species could not be correct: I did not imagine that vultures would ever have a problem finding food and shelter in India. However I am being proved wrong! Within four

years of the publication of *Birds to Watch 2*, the forecasts of this book are becoming reality. I have received alarming reports that vultures are declining rapidly all over their former strongholds in northern India. There have been many news items in local newspapers reporting that carcasses are being left uneaten because of the scarcity of vultures. Carcasses which used to be consumed within minutes now rot for days and in many areas only the village dogs are left to scavenge on them.

It is difficult to quantify the overall decline in vulture numbers because no baseline data on an all-India basis are available. However, some idea of the population crash can be made from the studies of Dr Vibhu Prakash, Principal Scientist of the Bombay Natural History Society. In the mid-1980s, whilst carrying out PhD research on the birds of prey in Keoladeo National Park, Bharatpur, in Rajasthan state, Dr Prakash counted around 350 nests of White-rumped Vultures inside the park. However in 1998 he has seen only 25 nests – more than 90% decline in ten years. We can only speculate as to the rate of decline in other areas. We also do not know the decline in the populations of Eurasian Griffon, Long-billed and Egyptian Vultures because no studies have been conducted on their nesting sites or in their foraging areas.

Without proper studies it is difficult to determine the main reason(s) for the decline in vulture numbers. Habitat destruction or hunting, the usual reasons for major population crashes, can both be ruled out in this case. Large trees, used for nesting by White-rumped Vultures (Long-billed and Egyptian vultures normally nest on cliff ledges), are still plentiful in the countryside, and few people eat vultures as they are considered unclean. With a huge number of unproductive livestock, food is not in short supply.

So what are likely to be the reasons for the population crash? I suspect that new pesticides could be responsible: there are several reports of vultures dying after eating cattle carcasses. Perhaps this process is slow and insidious: through the process of bio-magnification, the vultures are accumulating lethal doses of pesticides. They may also be experiencing nesting failures because of egg-shell thinning. These were known to be the causes of population crashes of the Peregrine Falcon *Falco peregrinus* in Europe and North America and the Brown Pelican

Pelecanus occidentalis in North America during the 1960s. Alternatively, it could be some avian disease which is killing the vultures. If this is the case, we will have to wait for the epidemic to subside, leaving a few healthy birds to repopulate the countryside. Another possible reason is that abnormally high populations of vultures were formerly maintained in India due to the abundant food supply (of cow carcasses). Now, because of liberalisation of the Indian economy and other market forces, villagers are keeping fewer cattle, resulting in a decrease in food supplies and the population of vultures is currently stabilising. It is certainly true that in many areas villagers are shifting to keeping higher-quality breeds of cattle which are well looked after and do not die and rot in the countryside. However, it is doubtful if this trend is widespread, especially in the so-called cow-belt consisting of the states of Uttar Pradesh, Rajasthan, Bihar, Madhya Pradesh and Gujarat, where the largest numbers of vultures are found.

Perhaps there is no single factor for the decline of vultures in India. Until we are able to solve the mystery of vulture deaths, we may not be in a position to devise conservation measures to save these majestic and useful birds.

The purpose of this note is to draw attention to a possible decline in vulture numbers across northern India. Observers are urged to take careful notes on the number and species of vultures seen whilst in the region so that some quantitative data can be obtained.

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- 3 Collar, N. J., Crosby, M. J. & Stattersfield, A. J. (1994) *Birds to watch 2: The world list of threatened birds*. BirdLife International, Cambridge.

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1



2

1. Adult Saunders's Gull *Larus saundersi* in full breeding plumage (Photo John Holmes)
2. A group of mixed White-rumped *Gyps bengalensis* and Long-billed *G. indicus* Vultures (Photo Tim Loseby) (page 40)
3. Birds for sale at a Vietnamese market (Photo Richard Craik) (page 22)
4. Juvenile White-eared Night Heron *Gorsachius magnificus* rescued from a Nanning market (Photo Lee Kwok Shing) (page 13)



3



4

Saunders's Gull colony in South Korea: first nesting record outside of the People's Republic of China

The Saunders's Gull *Larus saundersi* is endemic to coastal eastern Asia, nesting adjacent to the Yellow Sea, and wintering southwards. Rose and Scott¹ estimate the population at only 3,000, yet winter surveys reveal over 1,000 each in Taiwan² and Japan,³ at least 3,000 in South Korea,⁴ and a minimum of 1,100 in China (including Hong Kong).² The population thus appears to be nearer 6,000.

Nests of this charismatic species were first found as recently as 1984, in coastal salt-marsh in Jiangsu Province, People's Republic of China.⁵ Although claimed to breed in Mongolia,⁶ further research confirmed the species's nesting dependence on salt-marsh adjacent to tidal-flats. Breeding areas are centred in Jiangsu and Liaoning Provinces, China.^{7,8}

On 9th May 1998, whilst surveying waterfowl on a tidal-flat at Teibu Do and Shihwa Lake on South Korea's west coast, I observed at least 25 summer-plumaged adult Saunders's Gulls, mostly paired up. Several were apparently displaying, bowing and tossing their heads and calling vigorously. The birds then flew towards an adjacent 200–300 ha salt-marsh which fringes the recently formed (1988–1994)⁹ Shihwa reclamation lake.

Upon entering the salt-marsh, I was dive-bombed six to eight times to within 1 m by Saunders's Gulls, and I counted a total of 102 adults circling overhead. After photographing several possible nests, I left to reduce disturbance.

I returned on 26th May, with environmentalist Lee Hye Kyoung, and we quickly located three Saunders's Gull nests – containing respectively one, two and three brown-green, heavily dark splotched eggs. The nests were all simple circular depressions on the ground, at the base of *Suaeda* bushes and within 20–50 m of each other. This is very similar to nest descriptions from China.⁵ Although fewer than 50 adults were counted, we estimated that about 30 pairs were present.

On 10th June I again found three nests with eggs – two of these for the first time. However, on 28th June and in July when I revisited the site with Ministry of Environment officials, I could find no gulls, only broken eggs: the contents

presumably taken by mammalian predators or Black-billed Magpies *Pica pica*. It appears that human disturbance may have contributed to the failure of the colony.

If Saunders's Gulls are to be re-attracted to the site, the vegetation needs to be controlled as it is becoming too dense for nesting,⁷ the salinity of Shihwa Lake needs to be adjusted and access needs to be strictly regulated. Moreover, the salt-marsh and tidal-flats require special conservation designation – not only for Saunders's Gulls, but for other endangered species dependent upon the site such as the Chinese Egret *Egretta eulophotes*.

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From the Field

Compiled by Craig Robson

GUIDELINES FOR CONTRIBUTORS

These are largely unconfirmed records covering the period May 1997–August 1998. We urge that, if they have not already done so, contributors provide full details to the relevant regional organisations in due course.

CHINA

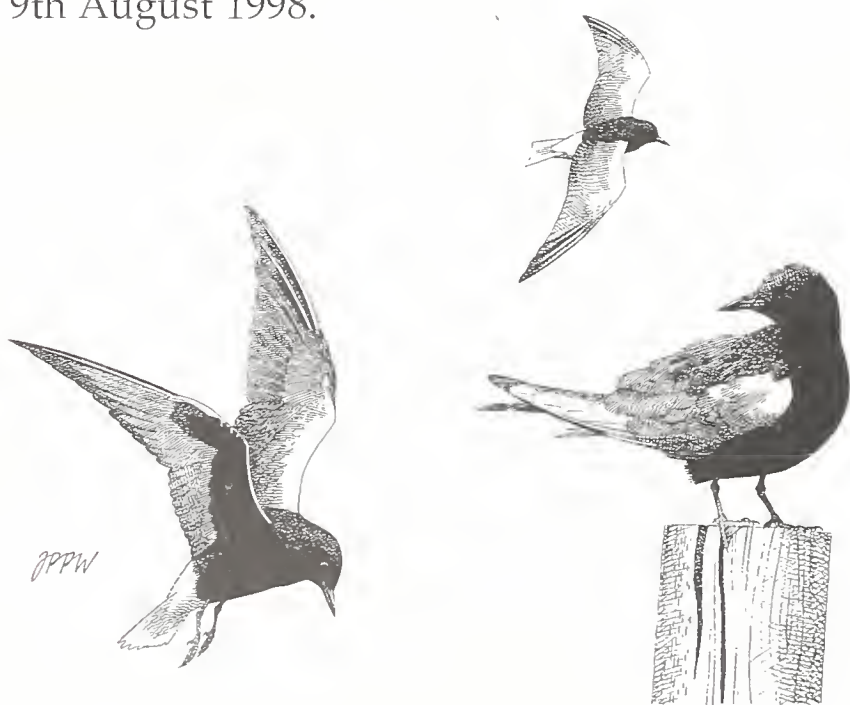
Two **Pine Grosbeaks** *Pinicola enucleator* were seen near Elephant Pool, Omei Shan, Sichuan on 18th March (ND,AP). An interesting report was of six **Black-faced Spoonbills** *Platalea minor* at Dalai Hu (Hulum Noor) from 27th April into early May. This suggests that breeding may occur in Russia or perhaps in Heilongjiang. At the same locality was a pair of **Mute Swans** *Cygnus olor*, the first breeding record from north-east China.

INDIA

A **Pectoral Sandpiper** *Calidris melanotos* at Harike Bird Sanctuary, Punjab, on 10–11th May 1998 (PU) was a first for the Indian subcontinent. At the same locality, there were three and then four **White-winged Terns** *Chlidonias leucopterus* on 10th May and 26th July 1998 respectively and two **Bristled Grassbirds** *Chaetornis striatus* in a new area on 25–26th July 1998 with a pair still there on 14–16th August as well as a second pair in the same locality as in 1997. Further south, the same observer found 12 **Indian Skimmers** *Rynchops albicollis* (four adults and eight juveniles) and another **White-winged Tern** at Okhla, Delhi, on 9th August 1998.

LAOS

At least three **Pygmy Blue Flycatchers** *Muscicapella hodgsoni* at Phou Louey National Biodiversity Conservation Area (2,000 m elevation), Houaphanh Province, east N Laos on 18th May 1998 (PD) were the first recorded from N Laos and also at rather high altitude. Also of interest here were an **Amur Falcon** *Falco amurensis* on 15th May 1998 (PD) and a singing **Lesser Cuckoo** *Cuculus poliocephalus* on 17th May 1998 (PD). Several **Yellow-vented Warblers** *Phylloscopus cantator*, mostly singing, were found in riparian semi-evergreen forest at Phou Louey and Nam Et NBCAs (550–1,100 m), Houaphanh, during the first half of May 1998 (PD), perhaps indicating a resident population. Several **Rufous-vented Laughingthrushes** *Garrulax gularis* were also seen in Nam Et NBCA in early May 1998 (DSh). A single **Chestnut Thrush** *Turdus rubrocanus* at Hin Namno NBCA, Khammouane Province, on 16th February (PD) was a new record for C Laos and also at the unusually low altitude of only 200 m. Previously unidentified tits at this locality (RT, 1996) were seen again during 8–28th February and proved to be **Green-backed Tit** *Parus monticolus* (PD,DSh), surprisingly a new species for the country. Interesting records from Dong Khantung proposed NBCA, Champasak Province, S Laos (PR), included **Mangrove Whistler** *Pachycephala grisola* and **Manchurian Reed Warbler** *Acrocephalus (agricola) tangorum* in February, both new records for Laos, two **Masked Finfoots** *Heliopais personata* in July, confirming that the species breeds in S Laos, and a single **Sarus Crane** *Grus antigone* and a pair of **Giant Ibises** *Pseudibis gigantea*, also in July. Also of interest were a pair of **Wire-tailed Swallows** *Hirundo smithii* found nesting on a guest house at Pakxong (Pak Song), on the Bolovens Plateau c. 50 km from Pakse, Champasak, in mid-February (ND,AP).



White-winged Terns *Chlidonias leucopterus*
by Jan Wilczur

MALAYSIA

Peninsular Malaysia

As expected, **Aleutian Tern** *Sterna aleutica* has been added to the national list, with four birds seen on the Johor River on 1st May 1998 (SR,SSu). A female **Malaysian Honeyguide** *Indicator archipelagicus* at Panti Forest Reserve on 12th February (SR,AH,LKC) and a partial summer-plumaged **Chinese Egret** *Egretta eulophotes* at Jason's Bay on 13th February (SR,AH,LKC) were apparently both new records for Johor State.

Sabah

A male **Yellow-rumped Flycatcher** *Ficedula zanthopygia*, seen in Tawau Hill Park on 2nd March (SS), appears to be the first from mainland Borneo. A number of unusually high-altitude records were reported from Mount Kinabalu National Park in May 1998 and, disturbingly, some of these are apparently due to forest fires at lower levels. There was a single **Black-bellied Malkoha** *Phaenicophaeus diardi* at 1,700 m on 3rd–4th (CG,SS), a **Storm's Stork** *Ciconia stormi* circling at 1,600 m on 4th (CG,SS,IM), a **Blue-winged Pitta** *Pitta moluccensis* at 1,600 m on 7–9th (CG,SS,IM), three **Dusky Broadbills** *Corydon sumatranus* at 1,600 m on 4th (CG,SS), two **Black-headed Bulbuls** *Pycnonotus atriceps* at 1,600 m on 7th (CG,SS), two **Orange-headed Thrushes** *Zoothera citrina* at 1,800 m on 6th (CG,SS), one or two **Horsfield's Babblers** *Malacocincla sepium* at 1,700 m on 3rd–4th and, of particular interest, a male **Pied Bushchat** *Saxicola caprata* around park headquarters on 2nd (CG,SS). **Mountain Barbet** *Megalaima monticola* was also recorded at 1,600 m (CG,SS) but was found straying up to 1,700 m here in April 1996 (CR,DS/Birdquest).

MYANMAR (BURMA)

A short tour of the western part of the country (CR/Birdquest) produced a few interesting records. Two pairs of **White-bellied Minivets** *Pericrocotus erythropygus* at Kazunma on 17th March were apparently new records for S Burma, while a single **Curlew Sandpiper** *Calidris ferruginea* along the Irrawaddy River at Pagan on 13th March and a male **Tickell's Blue Flycatcher** *Cyornis tickelliae* north of Saw on 23rd March were both new for C Burma. A **Sand Martin** *Riparia riparia* amongst a mixed flock of house martins *Delichon* at 1,300 m elevation above Mindat, Chin State, on 23rd March was new for W Burma and also at a higher elevation than normal. Two other



Orange-headed Thrush *Zoothera citrina*
by Jan Wilczur

species at unusually high altitude were a **Blue-throated Barbet** *Megalaima asiatica* at 2,400 m above Mindat on 25th March and a **Common Hoopoe** *Upupa epops* at 2,200 m on Mount Victoria, Chin State, on 21st March.

NEPAL

There were several good wader records in spring, with Nepal's third-ever **Terek Sandpiper** *Xenus cinereus* near Kosi Barrage on 13th May 1997 (ST,BC,TR), a single **Curlew Sandpiper** *Calidris ferruginea* with a damaged wing at Kyanjin, upper Langtang Valley, on 8th April (SB,CH) and a flock of 40 **Pied Avocets** *Recurvirostra avosetta* at Kosi Barrage on 9th April (TG/Naturetrek), the highest national count to date. The sighting of two **Jerdon's Babblers** *Chrysomma altilore* at Rani Tal, Sukila Phanta Wildlife Reserve, on 4th May 1998 (HB,CGu,BM,BC) further extends the range of this under-recorded grassland skulker in Nepal. A single **Rufous-tailed Lark** *Ammomanes phoenicurus* at the same place on 20th March (HB) was new for the reserve and only the third locality record from Nepal. Also of note in the reserve were a maximum of 53 **Finn's Weavers** *Ploceus megarhynchus* near Sukila Phanta and Jhilmila grasslands on 24th March (HB,BM,KP,HC) and a **Paddyfield Warbler** *Acrocephalus agricola* mist-netted at Rani Tal on 11th November (HB).

SINGAPORE

The most interesting report received was of a juvenile **Stilt Sandpiper** *Micropalama himantopus* seen briefly with **Whimbrels** *Numenius phaeopus* and **Curlew Sandpipers** *Calidris ferruginea* at

Sungei Buloh Nature Park on 1st February (SR). Although there are no published records of the species from South-East Asia, there is a previous reported record from Singapore, at Serangoon in June 1986 (RO); it has occurred as a vagrant in Japan (including Ogasawara Islands) and Australia. A juvenile **Eurasian Hobby** *Falco subbuteo* over village ponds at Pulau Ubin on 15th March (SR,NM) was a first for the country and other noteworthy reports included two **Malaysian Eared Nightjars** *Eurostopodus temminckii* at Bukit Timah Nature Reserve on 7th February (SR) and several **Swinhoe's Snipe** *Gallinago megala*, with a single at Marina East on 22nd March (SR,RO,SSu), two on the Sime Forest pond on 26th March (SR) and a single at Mount Imbiah, Sentosa, on 15th April (SR,MC). A female **Ruby-cheeked Sunbird** *Anthreptes singalensis* seen at Sungei Buloh Nature Park on 14th January (IG) would perhaps be only the second Singapore record, if accepted.

THAILAND

A long-predicted addition to the Thai list, **Short-toed Coucal** *Centropus rectunguis*, was found at Hala-Bala in the extreme south, where two were heard on 29–30th April (TS,JS,TT,UT). Of much greater interest perhaps, were two recent observations of the much under-recorded **White-fronted Scops Owl** *Otus sagittatus*; one in daylight near Huai Mae Dee, Huai Kha Khaeng Wildlife Sanctuary, on 16th March (BS,JS,UT), a major northward range extension, and three roosting together at Hala-Bala in the extreme south on 28th

April (TS,JS,TT,UT). Three **Ruddy Shelducks** *Tadorna ferruginea* were found at Rama 6 Army Camp, Cha-am, Phetchaburi, on 29–30th November (PNi,AW,JWi *et al.*) and there was a single bird (probably one of the same group) between Wat Khao Takao and Wat Khung Damnak, Ban Laem, Phetchaburi, on 14th December (AW). In the north, a male **Mandarin Duck** *Aix galericulata* was present at Nong Bong Khai, near Chiang Saen, Chiang Rai, on 10–11th January (DA,NA,JL). Reported sightings of four **Maroon Woodpeckers** *Blythipicus rubiginosus* and a single **Rusty-breasted Cuckoo** *Cacomantis sepulcralis* at Phraek Ta Khro Forest, Hua Hin District, Prachuap Khiri Khan, on 2nd January (CB,KB,SI,KW), would constitute a major northward range extension for both species into southern W Thailand, if accepted. A flock of **Brown-backed Needletails** *Hirundapus giganteus* at Nam Khong, Mae Hong Son, on 1st March (ND) were accompanied by a single **White-throated Needletail** *H. caudacutus*, confirming that the latter species occasionally winters in the country. A single **Pied Imperial Pigeon** *Ducula bicolor* which flew over Sam Phraya Beach, Khao Sam Roi Yot, Prachuap Khiri Khan, on 9th December (AS) was apparently new for coastal W Thailand. Following close on the heels of the first Thai record, there was another **Common Ringed Plover** *Charadrius hiaticula* at Rim Khong, Chiang Saen, on 27th February (AP), which had apparently been present for some time and two birds were present on 16th April (TT). A breeding-plumaged **Oriental Plover** *Charadrius veredus* on a beach at Lun Tee Bay, Ko Phi Phi Don, Krabi, on



Painted Storks *Mycteria leucocephala* by Jan Wilczur

7th May 1998 (SBr,RM,RTu) was a first for S Thailand, and another vagrant wader, a **Spoon-billed Sandpiper** *Calidris pygmeus*, was found on Khao Daeng Beach, Khao Sam Roi Yot, Prachuap Khiri Khan, on 8th December (AS). A single **Pallas's Gull** *Larus ichthyaetus*, seen at Bang Poo, Samut Prakan, on 23rd November (SSp) and 21st December (KS), was apparently the first from C Thailand. Occasional over-wintering was confirmed for **Von Schrenck's Bittern** *Ixobrychus eurhythmus*, with sightings on several dates at Khao Pu-Khao Ya, Phatthalung, between mid-December and 26th April (MCi). A breeding-plumaged **Indian Pond Heron** *Ardeola grayii* was found at A. Muang, Krabi, on 22nd May 1998 (PR,SSo), near the site where one was seen a year previously, suggesting that the species may be an annual non-breeding visitor in the south. The period under review proved very interesting for large waterbird records. Sixty **Painted Storks** *Mycteria leucocephala* were observed flying over ponds near Ban Laem, Phetchaburi, on 2nd November (AW) and another seven were seen in Maharaj District, Ayutthaya, on 2nd January (ND,PR). The latter area also held an impressive concentration of c. 1,000 **Intermediate Egrets** *Mesophoyx intermedia* and an apparently new breeding colony of **Asian Openbills** *Anastomus oscitans*, thought to contain at least 1,000 nests (ND,PR). Counts at another large waterbird roosting/nesting colony at Khuan Khisian and nearby areas, Thale Noi, Phatthalung, on 14–15th January (WG,NK,JM,PN) revealed 2,467 **Little Cormorants** *Phalacrocorax niger*, 953 **Purple Herons** *Ardea purpurea*, 2,521 assorted egrets, 852 **Black-crowned Night Herons** *Nycticorax nycticorax*, a single **Painted Stork** and 44 **Black-headed Ibises** *Threskiornis melanocephalus*. Another **Black-headed Ibis** was seen at Rangjan, Samut Sakhon, on 28th December (JW). Offshore, a **Brown Booby** *Sula leucogaster* and a **Short-tailed Shearwater** *Puffinus tenuirostris* were seen from a fishing boat c. 20 km west of Ko Rok, Krabi, on 30th December (YM) and there was another **Short-tailed Shearwater** 5–10 km south-east of Ko Phi Phi Don, Krabi, on 8th May 1998 (SBr,RM,RTu). A single **Tiger Shrike** *Lanius tigrinus* at Khung Krabaen Bay, Chanthaburi, on 26th April (BS) appears to be the first from SE Thailand. In the north, at least two **Grey-bellied Tesias** *Tesia cyaniventer* were found at Wat Tham Pha Phlong gully (570 m elevation), 7 km west of Chiang Dao, Chiang Mai, on 13th and 17th April (PD,DH) and were seen by others earlier in the year; welcome recent records of this very scarce,

local resident. A visit to Doi Patang, south of Chiang Saen, during 2nd–4th March (AP) resulted in minor range extensions for several other localised Thai species, including **White-bellied Redstart** *Hodgsonius phoenicuroides*, **Crested Finchbill** *Spizixos canifrons*, **Brown-breasted Bulbul** *Pycnonotus xanthorrhous*, **White-browed Laughingthrush** *Garrulax sannio* and **Spot-breasted Parrotbill** *Paradoxornis guttaticollis*.

VIETNAM

Further fieldwork on Ngoc Linh, a peak in the highlands straddling the Gia Lai Kon Tum/Quang Nam Da Nang Province border, C Annam, in early spring 1998 (JE), revealed more novelties. So far, six of the species found appear to be represented here by undescribed taxa, **Black-hooded Laughingthrush** *Garrulax milleti* (previously considered monotypic), **Coral-billed Scimitar Babbler** *Pomatorhinus ferruginosus*, *Cutia Cutia nipalensis*, **Chestnut-tailed Minla** *Minla strigula*, **Rufous-backed Sibia** *Heterophasia annectans* and **Stripe-throated Yuhina** *Yuhina gularis*, and further research may confirm several more new subspecies, with **Golden-breasted Fulvetta** *Alcippe chrysotis* and **Black-throated Parrotbill** *Paradoxornis nipalensis* being particularly likely candidates. Recent records of **Black-hooded Laughingthrush**, **Coral-billed Scimitar Babbler** and **Black-throated Parrotbill** (not **Golden Parrotbill** *P. verreauxi*) from S Laos, mentioned in recent issues of *Forktail* and the OBC Bulletin, are likely to be of the same subspecies. Also of great interest from a distributional point of view on Ngoc Linh were **Stripe-breasted Woodpecker** *Dendrocopos atratus*, **Red-tailed Laughingthrush** *Garrulax milnei*, **Yellow-billed Nuthatch** *Sitta solangiae*, **White-browed Shrike Babbler** *Pteruthius flaviscapis*, **Black-eared Shrike Babbler** *P. melanotis* and **Blue-winged Minla** *Minla cyanouroptera*. Interesting records from Cochinchina (RS) included a single **Blue-eared Kingfisher** *Alcedo meninting* in shady canal-side trees near Can Tho, Hau Giang, on 22nd March, six **Grey-headed Lapwings** *Vanellus cinereus* at Dong Cat State Farm, Dong Thap, on 4th March, and a **Peregrine Falcon** *Falco peregrinus* at Tram Chim, Dong Thap Province, on 3rd March.

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NEW BIRD BOOKS

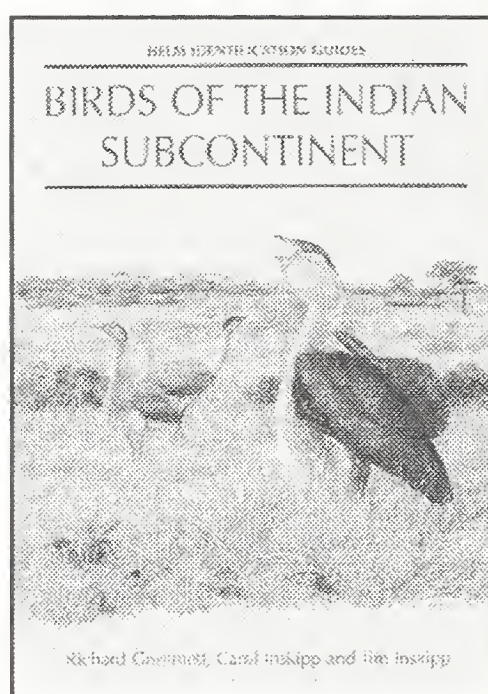
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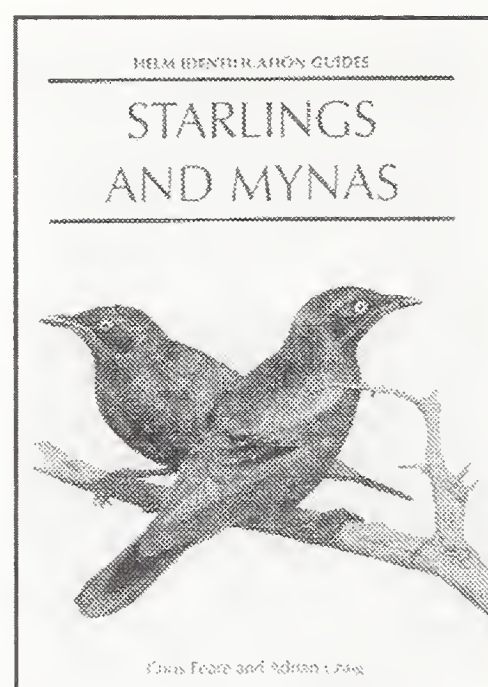
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Little-known Oriental bird

Pleske's Warbler *Locustella pleskei*



Of the world's nine species of *Locustella* warbler,¹ the species that breed in eastern Asia are the least known. Of these, the most restricted in range is Pleske's Warbler *Locustella pleskei*.



Pleske's Warbler *Locustella pleskei* Mai Po marshes, Hong Kong, 1 November, 2 and 3 February. (Photos Paul Leader)

Taxonomy

The taxonomic position of *Locustella pleskei* has long been disputed. Some authorities, including Vaurie,² treated *pleskei*, Middendorff's Warbler *L. ochotensis* and Rusty-rumped Warbler *L. certhiola* as a single species. Williamson³ and Voous⁴ treated *ochotensis* and *pleskei* as conspecific and *certhiola* as distinct. Nazarov and Shibaev,⁵ as a result of studies of both *ochotensis* and *pleskei* on the breeding grounds, treated them as distinct species because of differences in morphology, vocalisations and ecology. More recently, Baker⁶ also treated it as a distinct species. Kennerley and Leader⁷ regarded them as different species, based on differences in morphology, habitat, behaviour and date of arrival on the breeding grounds. In Japan, *pleskei* arrives in early May, a full month before *ochotensis*, and occupies area of lush, almost subtropical, vegetation, whereas *ochotensis* prefers

areas of grassland and dwarf bamboo. However, Brazil⁸ considered the differences in habitat and song marginal, and that alone they were insufficient to separate them. Beaman¹ has suggested that these differences may reflect the difference in latitude, and therefore habitat and climate, between the Izu Islands and northern Hokkaido, and notes that in the Russian Far East *pleskei* arrives only in the last half of May while the first *ochotensis* reach southern Sakhalin at the very end of May. Beaman does, however, argue that if *ochotensis* merits specific status then *pleskei* is sufficiently different again to do so.¹

The status of *ochotensis* itself is confused, with many authors³ referring to hybrids between it and *certhiola*. Baker⁶ states that hybridisation is unlikely, given that the breeding areas of the two forms are not known to overlap. It may well be that a lack of understanding of the extensive variation, particularly in first-winter plumage (pers. obs.), in *certhiola* accounts for some of the so-called hybrids. Baker⁶ also notes that intermediate individuals are frequently encountered in the Magadan area on the north coast of the Sea of Okhotsk. Photographs of two individuals trapped in the Magadan area by Peter Kennerley, which were typical of the birds seen (P. R. Kennerley pers. comm.), do show some features intermediate between *ochotensis* and *certhiola*, but also show characters shared by neither; such birds, especially if stable in their morphology, may well be a separate form rather than hybrids. Further work in this area could well shed light on the complex as a whole.

Marked differences in morphology and vocalisations within the *certhiola* complex (pers. obs.) also require further research.

However, while acknowledging the need for further research, most recent authorities have treated *pleskei*, *ochotensis* and *certhiola* as distinct (e. g. Beaman,¹ and Inskipp *et al.*⁹).

Distribution

The breeding range of Pleske's Warbler is confined to offshore islands in southern Japan, north to the Izu Islands.⁸ Some 2–3 pairs nest annually in Fukuoka and they also occur off Shimane Prefecture, Honshu. The population probably measures in the low hundreds (N. Moores, pers. comm.). In South Korea Austin and Kuroda¹⁰ described it as 'a not uncommon but localised summer visitor'. It is also found on small islands in Peter the Great Bay near Vladivostok, Ussuriland, Russia.⁵

Cheng describes it as a migrant to Jiangsu, Fujian and Guangdong provinces.¹¹ La Touche¹² did not record it from Shaweishan, off the east coast near Shanghai (where he found *ochotensis* to be common), or elsewhere in north-eastern China.

Cheng¹¹ does not mention any records of Pleske's Warbler during the winter months, and despite the widespread belief that it winters widely through south-eastern China¹³ to date the only winter records from China, or elsewhere, are from the Inner Deep Bay area in Hong Kong.^{7,14,15} In Hong Kong it is very rare – although typical of *Locustella* warblers, the species's skulking behaviour makes it difficult to detect in the field. The majority of records are of trapped birds, yet despite regular trapping in suitable habitat at WWF HK Mai Po Nature Reserve (Mai Po NR), it remains rarely recorded. Extreme dates are 27th October to 8th May. Dement'ev and Gladkov¹⁶ note that it winters in the Sunda Islands; however, White and Bruce¹⁷ only record *ochotensis* from the region. Brazil⁸ refers to a single winter record of either *ochotensis* or *pleskei*, but given the more southerly wintering area of *ochotensis*, it is perhaps more likely to have been *pleskei*.

Habitat requirements

During the breeding season, Pleske's Warbler is found on offshore islands where it breeds in damp grassy areas with rich vegetation, typically close to the sea.

All recent records in Hong Kong have come from wetland areas and only one record has been away from Mai Po NR.¹⁵ All trapped birds have come either from extensive areas of *Phragmites* or from areas of low shrub and nearby *Phragmites*. There are also field records from mangrove areas where *Candelia candel* and *Aegiceras corniculatum* predominate. The birds here are frequently heard to give a quiet subsong which, combined with regular sightings of some individuals, indicates that these birds are on winter territories. The one record away from Mai Po NR was a bird in an area of rank grass and Water Hyacinth *Eichhornia crassipes* with nearby *Phragmites* in a low, wet area between commercially operated fishponds. It was seen to forage amongst the Water Hyacinth leaves.

Status

Little recent information is available on the population of Pleske's Warbler. Brazil⁸ states with respect to both *ochotensis* and *pleskei*, which he treats as conspecific: 'Though fairly common in

suitable habitats...the total population must be very small'. It is undoubtedly very scarce in Hong Kong in winter, as it is still rarely trapped, despite fairly intensive trapping at Mai Po NR. The fact that these are the only known records during the winter months, making it possibly the smallest known wintering range of any Palearctic migrant, is of concern, particularly given the ongoing loss of wetlands in coastal China. The reedbeds in Hong Kong are the largest remaining in Guangdong. It is therefore recommended that the species be included in the Asian Red Data Book, and that the taxonomy of the complex be further studied.

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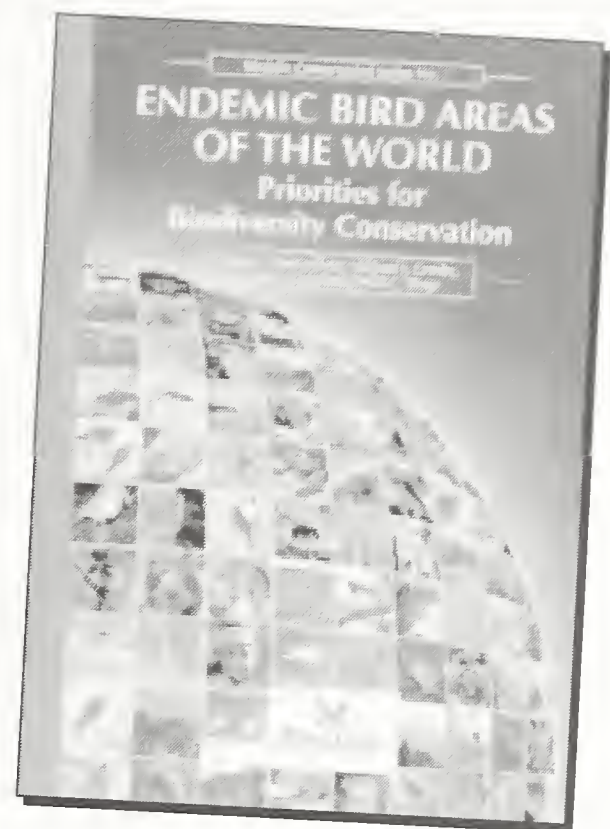


Recently Published

Endemic Bird Areas of the World: Priorities for Biodiversity Conservation, by A. J. Stattersfield, M. J. Crosby, A. J. Long and D. C. Wege. *BirdLife Conservation Series No. 7*, BirdLife International, 1998. Numerous maps and illustrations, 846 pp. ISBN 0 94688833 7.

In 1987, ICBP committed resources to an ambitious mapping of the world's biodiversity 'hotspots' (centres of uniqueness), as revealed by land birds with breeding ranges of an arbitrary 50,000 km² or less. Five years on, a team that included three of the present authors produced *Putting biodiversity on the map: priority areas for global conservation*, whose central findings were that nearly one quarter of land birds are restricted-range species (RRSs), most of these are threatened, and close to 90 percent could be accommodated in just two hundred or so *Endemic Bird Areas* (EBAs) worldwide; also that EBAs hold important elements of other wildlife.

Now, a BirdLife team has executed step two of this grand design, updating and re-ordering the science behind each EBA decision. Ten years in the making, *EBAW* is of huge scope and impressively even coverage (reviewed here, I have to admit, from the vantage of a few familiar toe-holds). Introductory chapters (all essential reading) cover: the nature of biodiversity and approaches to its conservation (focusing on complementarity of sites); what makes an EBA, what constitutes a pair versus the dispersed parts of just one EBA, and what distinguishes an EBA from a Secondary Area; what makes an RRS (explicitly not a species occupying less than 50,000 km² of habitat within a larger range); where the 218 EBAs are and what habitats predominate (tropical moist forests); EBA area versus number of RRSs supported; national totals of RRSs (the most, and most threatened, are both in Asia); ranking of EBAs for action; and the value of EBAs to threatened non-RRSs, *etc.* Text-boxing is employed throughout, lovelier to look at, perhaps, than to use, but there is no denying the value of being able to run parallel storylines. All the technical illustrations, habitat shots and occasional bird portraits are excellent. Secondary Areas (some just a map dot?) get an end chapter.



Appendices list RRSs and EBAs by family and/or country, and revised site codes.

In the main text, EBAs are grouped by regions defined politically. This mis-classifies a few, which is not of consequence in a strategic rather than biogeographical analysis, provided the prioritising of funds for conservation is not also regionalised. Each is then described under the headings of General characteristics, Restricted-range species, and Threats and conservation, with maps, a summary table of physical data and risks, a conservation priority rating, and synopsis of RRSs.

Forty-eight, from a few hundred to 0.6 million km², are of direct interest to OBC members, and numbers 157–161 cover my particular 'back yard' of peninsular Malaysia and the Greater Sunda islands. Unfortunately, and certainly not just for that reason, this happens also to be where I believe *EBAW* rigidity serves biodiversity conservation least well. Objective procedures cannot be faulted as such, but it happens they determine almost all of the local RRSs (hence EBAs) to be montane, whereas most threatened species of the area are not (*Birds to Watch* 2). The Sunda subregional lowland forest avifauna, larger than the combined communities of all adjacent EBAs, is over 60 percent endemic at that level but here merits only Secondary Area status, in one of the most damaged forest ecosystems of the tropics – at far

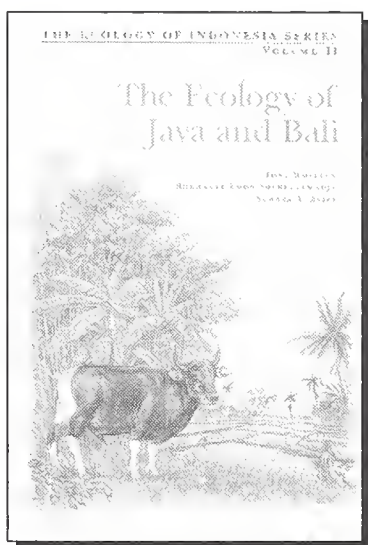
greater risk than probably any local mountain system.

Anomalies thrown up by the rules are not, of course, a reason for bending them, especially if the main intention has been that *EBAW* serves an in-house function as a BirdLife forward plan. It seems perfectly in order also that the design should require some form of *triage* to be operated. *EBAW* as a plan is a great proactive breakthrough. It is also on public sale, to many who will be led by the BirdLife stamp of authority into assuming they have the whole story: that global biodiversity needs go no further as far as birds are concerned. Unimportant? Perhaps, but shifting the PR goalposts is not something many users will have given thought to; certainly not those with power over South-East Asian forests, who will never read but would happily seize on a signal from a leading conservation body that nothing in their lowland concessions need embarrass. BirdLife's ongoing work may already have coped with all of this, in which case I speak out of turn, but no harm would come of the extra PR needed to correct an impression (perhaps in a flier that went out with the book). *EBAW* is a vast achievement for bird conservation and a lasting credit to its authors – too important by far to be misconstrued or exploited out of context. Get hold of a copy and understand it for yourself; there are plenty of reasons for needing one permanently at hand.

D. R. Wells

The Ecology of Java and Bali. By Tony Whitten, Roehayat Emon Soeriaatmadja and Suraya A. Afiff. Periplus Editions, Singapore/Oxford University Press, Oxford. 1996. xxiv + 969 pp + 32 colour plates. £50.00. ISBN 962-593-072-8.

This is volume II in the Ecology of Indonesia series. A wealth of solid information is packed into the 900+ pages of this reference work (the fattest volume in the almost completed series, with only Irian Jaya still to come). Little original habitat is left on Java and Bali, and perhaps therefore in contrast with the other volumes by Whitten *et al.* on Sumatra (Volume I) and Sulawesi (Volume IV), a considerable part in this book is dedicated to



human-related environmental issues. The book is divided into five parts. Part A treats the geographic setting of Java and Bali and continues with the 12 most critical ecological issues, such as ecological ignorance, population growth and tourism. Part B is an inventory of all ecological components (physical, biological and human), with a special section for the birds, containing a list of all Javan and Balinese endemics and an account of threats. Part C gives detailed descriptions of all major natural and artificial ecosystems, ten in total, with in some cases special sections for birds. Part D is attributed to conservation in all its aspects: human attitudes, loss of biological diversity, *etc.* Interesting information is given in the chapter including 27 major existing and potential conservation areas of Java and Bali, many unknown to the larger public and with first-hand information. Immediately the bias in the distribution of the areas is evident. A huge gap is formed by the province of Central Java where only two important reserves are found. The 'discovery' of a large lowland and hill forest area west of Dieng came too late for inclusion. Part E gives some philosophical background to environmental ethics and looks into the future with all the challenges for sustainable development, in the setting of the five state religions and the state philosophy of Pancasila. The book ends with five appendices of which the third, with a bird literature list for 49 selected sites, should be mentioned.

The book is richly illustrated, with both antique (pre-2nd World War) and contemporary (many by the senior author) photographs, instructive diagrams, maps, tables *etc.* A strong point of the book is the huge amount of data compiled from the non-English literature that has been made accessible to the general public. On the one hand there are the numerous Dutch, German and sometimes French publications of the first half of this century, and on the other many contemporary Indonesian papers and reports.

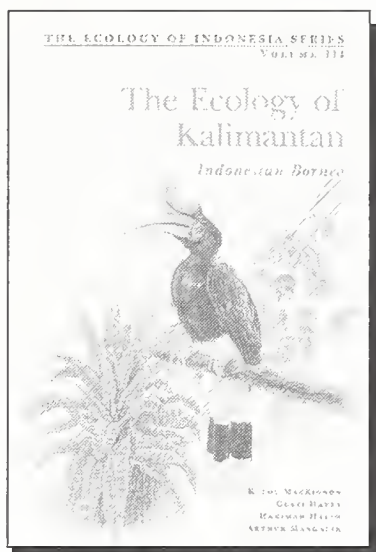
Again, Tony Whitten *et al.* have produced a major reference work that will prove to be extremely useful for both the professional ecologist and the layman, in both Indonesia (there will be an Indonesian version as for the other volumes) and the rest of the world.

Bas van Balen

The Ecology of Kalimantan: Indonesian Borneo.

By Kathy MacKinnon, Gusti Hatta, Hakimah Halim and Arthur Mangalik. Periplus Editions, Singapore/Oxford University Press, Oxford. 1996. xxiv + 802 pp + 44 colour plates. £50.00. ISBN 0-945971-73-7.

This is the third volume in the series on the Ecology of Indonesia. The diverse ecology, landscapes and problems of Borneo are thoroughly covered in this excellent reference book. Its 800+ pages are divided into 14 chapters. Six chapters are devoted to the ecological habitats following a general introductory chapter. Each chapter discusses the main habitats, together with their physical characteristics and inhabitants. The peoples of Borneo are discussed in chapter 8; the subsequent chapters deal with the forest, wetland and coastal resources. Economic development and the problems this brings are discussed in chapters 12 & 13. The final chapter summarizes the conservation of both the physical and biological resources of this island.



This impressive volume has obviously been written with the ecologist primarily in mind. Inclusion of chapters on agriculture, development and natural resources will give this book a far wider appeal than a standard ecological reference. Concisely written, each chapter also has a wealth of line drawings, maps, tables, etc. Additional topics are covered in 85 'information boxes' on a wealth of subjects including the feeding sites of squirrels, acid soils and pepper farmers! The colour photographs at the end of the book are of varying quality, although they do cover a wide range of subjects and give a feel of the diversity of the island.

The breadth of subjects and the depth of research in this volume are reflected in the 55-page (double column) bibliography. This provides an excellent start for anyone wanting to find out more about all aspects of this fascinating island. Birds are not neglected, with tables of endemics, and montane and mangrove specialists.

Kalimantan remains largely neglected by tourists and ecologists compared to Sabah and Sarawak. The vast majority of research cited in this volume has been gained from the Malaysian part of the island and applied to Kalimantan.

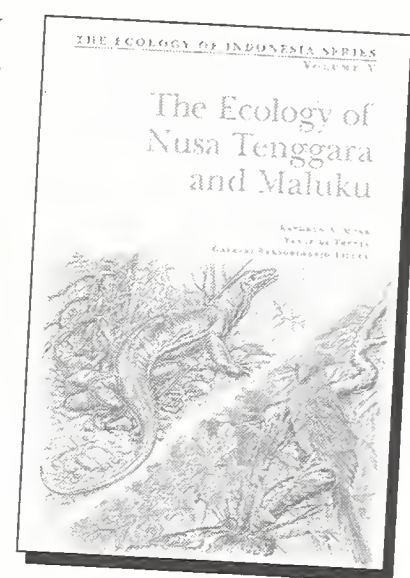
Therefore there is still much to learn about the distribution of the flora and fauna in Kalimantan. Even the bird diversity is little known and there is therefore great scope for any visiting birdwatcher to add to our knowledge of the avifauna. Poor infrastructure and facilities hinder the traveller in Kalimantan, but great rewards await those willing to make the effort to explore it.

This will undoubtedly become the standard reference book not just for Kalimantan but for the rest of the island of Borneo. I thoroughly recommend this book to anyone thinking of heading off for this fascinating island or just interested in its ecology.

Paul Jenkins

The Ecology of Nusa Tenggara and Maluku. By Kathryn A. Monk, Yance de Fretes and Gayatri Reksodiharjo-Lilley. Periplus Editions, Singapore/Oxford University Press, Oxford. 1997. xvii + 966 pp + 32 colour plates. £50.00. ISBN 962-593-076-0.

This textbook is volume V in The Ecology of Indonesia Series, and deals with 'the rest of' Indonesia – the distinct regions of Nusa Tenggara (the Lesser Sunda chain) and Maluku Province (including Halmahera, Seram, Obi and Aru). The aim of the series is to collate and formalise



the large amount of often unpublished ecological data from the region. The book is packed with information, although those expecting extensive sections on bird ecology will be disappointed. A staggering 1,300 references are given. The majority are unpublished reports or articles in inaccessible journals and it is a pity that more information on some of these is not given in the reference list (e.g. address of the place of publication or the address of an institution that will hold the report long term). There are many mistakes in the reference list and some citations are inadequate, e.g. "Booth *et al.* 1990. World economically important beetles" – that's it.

The first section describes the natural resources of the region – these include chapters on the physical environment and terrestrial habitats which will be very useful for ornithologists planning to study in the region.

There are boxes within the text of all sections, and the few to deal with birds offer information on the birds of Timor, endemic bird areas and megapode ecology. The final chapter of the opening section looks rather briefly at biogeography in the region and offers short accounts of several animal and plant groups. Again, there is little on birds that will startle OBC members. Extensive annexes cover island-by-island distributional lists of plants, some invertebrate groups, freshwater fish, amphibians, reptiles, birds and mammals.

The next section describes the region's human geography – settlement patterns, population trends and major current issues such as resettlement programmes. Then, in one of the book's strongest sections, the traditional land-use control systems of Adat and Sasi are described, with an example of the harvesting of megapode eggs. Expeditions studying bird declines in the region should read this section on the plane to Jakarta. The extensive section on resource utilisation runs through the use of forest products from rattans and cinnamon to large-scale logging. The commercial logging section was a little disappointing given the enormous importance of this forest land-use in the region. Like other sections, it seems to be stronger and more detailed on economics and management than it is on ecology. A section on agricultural regimes in the region (including an interesting treatise on shifting agriculture) is followed by the more immediately interesting final chapter on conservation. This includes a useful explanation of different reserve designations, lists of CITES protected taxa and threatened species, and a good case study on Komodo National Park. Each protected area is described briefly in an annexe (sizes, elevations and other data appear in another annexe, and threats to protected areas in yet another annexe). All this information could have been brought together, with good maps, into a single definitive composition on all the region's protected areas.

In conclusion, this is an important textbook which will be extremely useful for those studying birds in Indonesia – not for data on the birds themselves, but for the wealth of background information it offers on the region's physical, biological and cultural environment.

Stuart Marsden

Die Vögel Sri Lankas: ein Vogel- und Naturführer [The Birds of Sri Lanka: a bird and nature guide]. By Günter Lamsfuss. Max Kasperek Press, Heidelberg. 1998. 275 pp. 6 colour plates. £20. ISBN 3-925064-22-2.

To date there has been relatively little published in the German language on the natural history of Sri Lanka. This book is a welcome addition to the literature from the point of view of anyone who is not particularly well-versed in English but can read German.



The introductory sections are thorough. If you have never been quite sure of how monsoons arise, why there are two, and how they affect different parts of Sri Lanka, then read the five pages on geography and climate. A further 35 pages are devoted to nature conservation and a description of the country's protected areas. These sections form interesting and useful background reading, varying in depth from a single paragraph dedicated to each of the smaller sanctuaries, to several pages on each of the prime reserves such as the Sinharaja Forest. The author gives a history of the protected area, describes its major habitats, its flora and fauna, current legal status and threats to the ecology. Practical advice on the logistics of visiting is not included.

There follow overviews of the island's most important vegetation types and their fauna (excluding birds), before the author embarks on an explanation of the evolution and current composition of Sri Lanka's avifauna. This includes introductory sections on those Oriental bird families which may be unfamiliar to the first-time visitor and a paragraph is given on each of the 26 endemic species (as recognised by the Ceylon Bird Club). These are accompanied by a pleasing set of colour illustrations by Angelika Krischbin.

The second half of the book is taken up with a systematic section devoted to the birds. This is partly intended as a field guide with succinct identification paragraphs on each species, distribution maps and brief details of habitat and habits. It happily also functions as a complete annotated checklist updating the previous publications by Phillips and Wijesinghe.

Unfortunately, the birds are only illustrated in black-and-white – a decision made on grounds of economy. Christian Schulze's drawings are, for the most part, certainly recognisable to anyone familiar with Sri Lankan birds, but monochrome illustrations are not what is expected of a modern field guide. The book is, however, an extremely useful adjunct to the field guides that have up to now been regarded as standard, and will also help the visiting tourist gain a better understanding of the natural heritage of the Island of Serendip.

Krys Kazmierczak

The Bird Collectors. By Barbara and Richard Mearns. Academic Press, London 1998. xviii + 472 pp. £29.95. ISBN 0-12-487440-1.

The mass slaughter of birds in the name of science thankfully belongs to a bygone age, but this book reminds us of the important positive contribution of Victorian and earlier naturalists to ornithology through their collecting of study specimens. Barbara and Richard Mearns estimate that there are over nine million bird skins in the world's museums, and modern ornithology would surely be much the poorer if these collections did not exist, even if much of the shooting was wasteful and undisciplined. Indeed, it is clear that some Victorian collectors were as fanatical in their pursuit of birds as are some modern-day twitchers. 'Received green swallow from Jamaica. E delivered of a son', wrote the Victorian ornithologist and naturalist Phillip Gosse in his diary, putting his only child firmly in his place from the very beginning. But despite the joy that some bird collectors undoubtedly took in killing, the authors find Victorian collectors not guilty of the charge of primary responsibility for the extinction of any species. However, they add that 'there were certainly some extirpations where collecting hastened the end or contributed to the outcome'.

This book uses a mainly biographical approach, as may be expected from the authors of two previous books on the lives of eminent ornithologists. But there are also interesting insights into such topics as the history of taxidermy, collectors' attitudes to 'native helpers' and the modern-day role of bird specimen collections. Among the best known of the collectors of the Orient discussed in the book is the French priest Père Armand David, but there are also brief biographies of ornithologist-

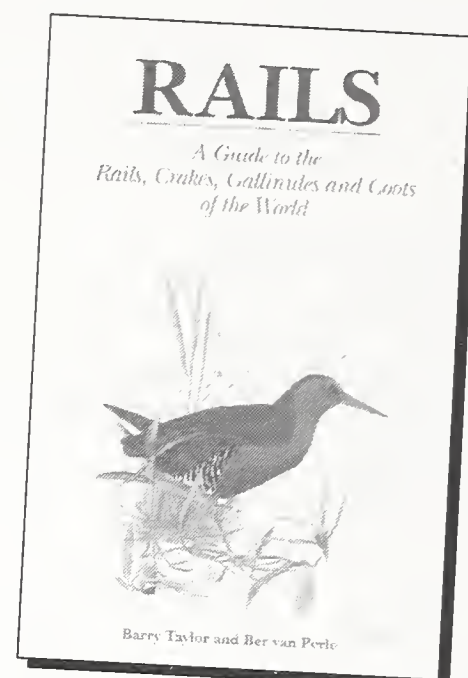
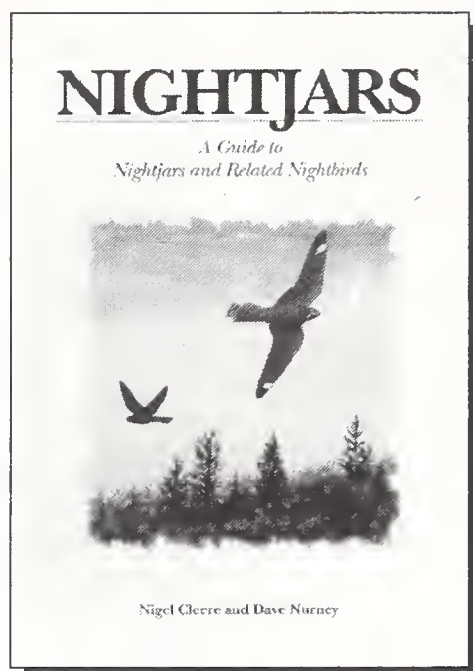
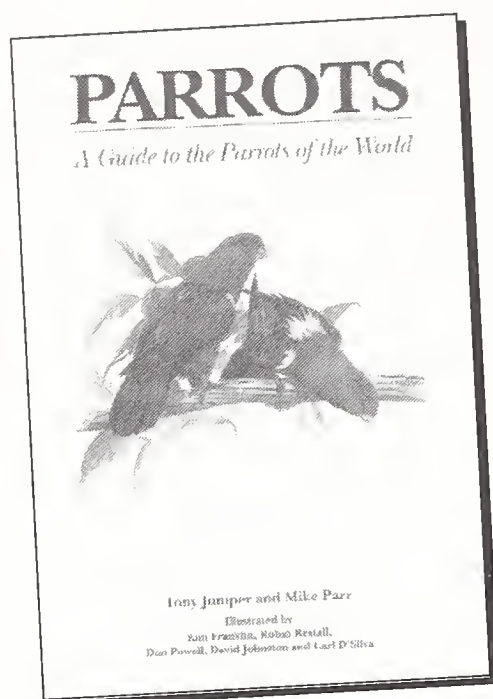
explorers in China and Central Asia such as Robert Swinhoe, General Nicholas Prjevalsky and the various members of the first and second Yarkand expeditions. India gets relatively short shrift, however, and 'two of the most renowned pioneer ornithologists of India', Major-General Thomas Hardwicke and Colonel William Sykes, get less than a page between them. Brian Hodgson, subject of a 1988 biography by Mark Cocker and Carol Inskipp, is referred to only in passing, while Frank Ludlow is mentioned in the introduction as a plant collector and his contributions to Himalayan ornithology are completely overlooked. But despite such gaps, this is a valuable study, illustrated with well chosen photographs, that reminds us of the debt that we owe to the ornithologists of earlier generations.

Michael Rank

Tibet's Hidden Wilderness: Wildlife and Nomads of the Chang Tang Reserve. By George B. Schaller and Harry N. Abrams, 1997. 168 pp. US\$45.00. ISBN 0-8109-3893-6.

The Chang Tang Reserve in north-western Tibet, established in 1992, is the second largest nature reserve in the world. Almost the size of Germany, it is second only to the Greenland National Park which consists mainly of ice cap, but because of its remoteness and for political reasons it is extremely little known. The region was completely closed to Westerners until a few years ago, but George Schaller assiduously wooed the Chinese authorities and persuaded them to allow him to conduct field research in the Chang Tang, spending about a year in the reserve itself and a total of 28 months including time spent in other areas of the Tibetan Plateau. As recently as the late 1940s there were still tremendous herds of yaks, wild asses and gazelles in the region, but due to human pressure, including widespread poaching, numbers are now greatly depleted. For example, Schaller recounts how he travelled 15,250 km by car around the desolate rim of the Taklimakan Desert and tallied just 18 Goitred Gazelles *Gazella subgutturosa*. But he adds that 'on occasion, we came upon an aggregation of animals that provided a glimpse into the past as it was a hundred years ago.'

OBC members may be disappointed to find that Schaller barely discusses bird life and concentrates on larger mammals such as the Chiru



(Tibetan Gazelle) *Pantholops hodgsoni*, which is hunted for its extremely fine and valuable wool, Tibetan Argali *Ovis ammon*, Wild Yak *Bos grunniens*, etc. But this book contains key insights into the social, economic and political problems which must be resolved if the Chang Tang has a future as a nature reserve, and is essential reading for anyone interested in the ecology of Tibet.

Michael Rank

Parrots: A Guide to the Parrots of the World. By Tony Juniper and Mike Parr. Pica Press, Sussex. 1998. 584 pp. 88 colour plates. £35.00. ISBN 1-873403-40-2.

The psittacines are one of the largest, most colourful and well-known groups of birds, but until the publication of this book, the only monograph on the world's parrots was Forshaw and Cooper's excellent but rather large and dated *Parrots of the world*. Pica Press has now provided us with a much more affordable and comparatively lightweight book. In 584 pages, including 88 colour plates, the 352 species of parrot recognised by the authors are illustrated and described.

The book's format conforms to that of previous books in the Pica Press family series, with detailed range maps in the text rather than with the plates. The introductory section is rather brief, with a mere five pages devoted to the 'natural history' of this very diverse group of birds. The illustrations are variable in quality, with some being excellent but others rather disappointing. Mostly, they do not match the marvellously detailed paintings of Cooper but a major advantage of the Pica Press book is that it

enables relatively easy comparison between species since there are many more illustrations: indeed, it is the first real identification guide to the world's parrots. Whilst the authors have incorporated a great deal of new information, much is also lacking as can be seen from comparison of some species accounts between this book and the parrot accounts in the *Handbook of the birds of the world* Volume 4 (Lynx Edicions). Nevertheless, it has to be said that to include everything that we now know about many of the parrots would be a phenomenal task, and would no doubt have delayed this book by several years.

There are a few odd mistakes in the book, such as the taxonomic treatment of Intermediate Parrot, which is a mere hybrid on Plate 49 and a full species on page 408. Nevertheless, this is a very useful book, and with 64 species of parrots in the Oriental Region, anyone with a keen interest in Oriental birds or parrots should certainly add this book to their collection.

Frank Lambert

Nightjars: A Guide to Nightjars and Related Nightbirds. By Nigel Cleere, illustrated by Dave Nurney. Pica Press, Sussex. 1998. 317pp. 36 colour plates. £30.00. ISBN 1-873403-48-8.

This book has been a long time in the making, which is hardly surprising given the dearth of information available on many of the caprimulgids and the amount of research required by the author to produce the definitive work which it undoubtedly is. Virtually all that is known at present about the 119 species in the order is summarised succinctly in the book and, with one exception (the newly described *Nechisar*

Nightjar *Caprimulgus solala* which is only known from a single wing), all the species are illustrated in colour.

The introduction contains sections on taxonomy and relationships, distribution, topography and morphology, structure and mechanics, plumages and moult, behaviour and the fossil record. This is followed by 36 colour plates which illustrate each species at rest and in flight and, where appropriate, show plumage variations. The bulk of the text comprises the species accounts, each of which has sections on identification, voice, habitat, habits, food, breeding, description, measurements, moult, geographical variation, distribution and movements, status, and references. Each account also contains a distribution map which, where appropriate, shows the distribution of subspecies. The final section of the book contains a bibliography of 662 references.

So, how good is it? The text is well written and comprehensive, and the difficulties involved in describing the varying hues of brown, buff and grey have been overcome admirably. One might question the treatment of the taxonomic status of some of the species. For example, in the context of the Oriental Region (where 28 of the species occur), Bornean Frogmouth *Batrachostomus mixtus* has been split from Pale-headed Frogmouth *B. poliolophus* but no justification is given for this treatment. Looking at the plate, the two forms do seem to be quite different though! Overall, the book is well designed and the maps are as accurate as might be expected given the current state of knowledge.

Many people will judge the book by the quality of the plates. In general these appear to be accurate, although some appear to be a little 'stiff'. The fact that the birds at rest are all drawn in virtually the same, slightly odd, pose (with one wing raised) perhaps does not help in this respect. Others are far too 'contrasty' (e.g. Common and Antillean Nighthawks in flight).

These minor quibbles aside, this is an excellent book of which the author and artist can be justly proud. There is clearly much still to be discovered about the Caprimugiformes (as evidenced by the frequency with which 'not known' and 'no data available' appears in the species accounts). If you are in the slightest bit interested in these fascinating birds, or in finding out where there are gaps in our knowledge, buy this book.

Andy Swash

Rails: A Guide to the Rails, Crakes, Gallinules and Coots of the World. By Barry Taylor. Illustrated by Ber van Perlo. Pica Press, Sussex, 1998. 600 pp. 43 colour plates. £35. ISBN 1-873403-59-3.

Barry Taylor has been studying rails, in particular the African flufftails, for at least 15 years, and as such is an expert on many species of rail. Such a devotion to birds that are so difficult to study, let alone observe, requires remarkable dedication and commitment. As a consequence, this book ranks as one of the most comprehensive books in the Pica Press family series and is certainly very good value for anyone with a global interest in birds. Under the constraints placed on authors by their publishers, the text of this book can be judged a great achievement.

In comparison with many books in this (and the Helm) series, the introduction is significantly more detailed, as are the maps, and there is more attention in the text to subspecific variation. Eighteen hundred references have been used in the preparation of the text, which runs to seven or more pages for the better-known species, such as Common Coot *Fulica atra* and Sora *Porzana carolina* and around 12 for Purple Swamphen *Porphyrio porphyrio* (considered by some to represent several species). Citations are provided within the text, in contrast to many recent books in the family series, making it relatively easy to track down original sources.

Forty-three plates depict all 133 extant rail species, as well as 12 of those that have almost certainly become extinct in the last 400 years, and many of the subspecies of rails that have been described. The plates are adequate but overall less pleasing than the text. They often seem to be remarkably empty, and a great opportunity to illustrate the plumages of young birds or the racial variation of some species has been missed. Furthermore, some of the illustrations are rather disappointing.

Many species of rail live in habitats that are under serious threat, or are themselves directly threatened by introduced predators or other impacts relating to the activities of man. One study suggests that as many as 2,000 island birds have become extinct in the tropical Pacific alone, of which the rallids figure prominently. I was pleased, therefore, to see a considerable amount of information on the conservation status of various species included in the text. I would hope that this book will not only stimulate more interest in a group of birds that are often neglected

because of the difficulty in observing them, but will also generate some additional interest in their conservation needs.

Frank Lambert

Birds of China. By Zhang Cizu, Zhu Xiang and Pang Bingzhang. China Forestry Publishing House, Beijing, 1997. 200 pp. \$59.95. ISBN 7-5038-1598-1. (Distributed outside Asia by UBC Press, Vancouver).

This large-format book is a photographic guide to the birds of China. Over 400 species are covered – approximately one third of the Chinese avifauna. The book is divided into seven sections according to different habitats; within each section species are arranged in systematic order.

Most of the photographs are of a high standard and are well reproduced. They cover a wide selection of species including a good number of endemics and Chinese specialities. It was pleasing to see photographs of such rare species as Crested Ibis *Nipponia nippon* and Chinese Merganser *Mergus squamatus*, as well as sought-after species like Tibetan Sandgrouse *Syrrhaptes tibetanus* and eight species of crane, whilst Ancient Murrelet *Synthliboramphus antiquus* at the nest was one of the more unusual shots. I was, however, disappointed to see that so many of the photos had obviously been taken in captivity, especially amongst the passerines.

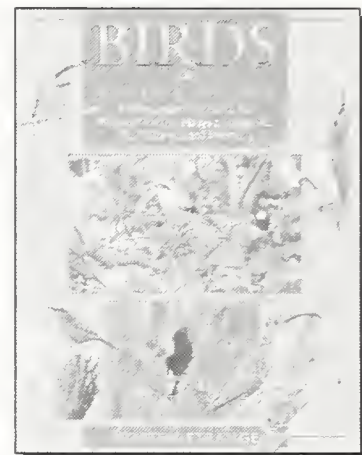
The text for each species covers all the usual subjects such as identification, distribution, habitat, habits, breeding, food and voice. The choice of English names is sometimes unusual or even quaint, and at odds with recent literature. The use of crowtit for parrotbill seems unnecessary, but the name Golden Eyes for *Bucephala clangula* is a charming variant on the usual spelling.

Although far from being a definitive guide to the birds of this vast country, this book provides a fine collection of photographs including many of rarely photographed species. It will therefore be of interest to anyone with a serious interest in Chinese birds.

Nigel Redman

Birds of South-East Asia: A Photographic Guide to the Birds of Thailand, Malaysia, Singapore, the Philippines and Indonesia. By Morten Strange. New Holland, London. 1998. 112 pp. £12.99. ISBN 1-85368-879-7.

This book begins with an introduction giving a brief overview of the region covered, its birds, the different habitats found there and the threats faced by many of the species. The bulk of the book is then used to illustrate a few examples from each of the



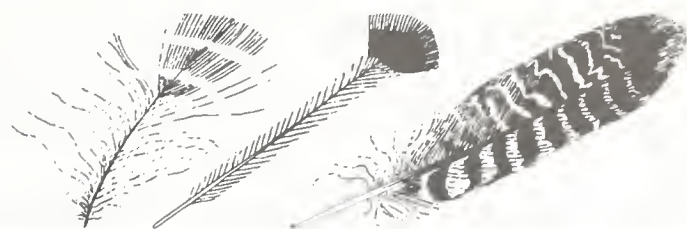
major bird families occurring in the region, concentrating on those species which are either national or single-island endemics. Finally, there are pages giving a summary of the ornithological highlights of each of the five countries featured.

This book is a vehicle for displaying some of the recent photographic work from the region. The species selections in some of the family accounts are somewhat arbitrary and there is a peculiar conglomerate 'family' incorporating pipits, white-eyes, wood-swallows, wagtails and shrikes, but these should not detract from the hundreds of superb photographs, the majority of which are Strange's own work. As the author points out in the introduction, this is the first time in a book on South-East Asia that all the photographs are of birds in the wild in their natural habitat.

The photographs can be enjoyed by anyone, beginner or seasoned birder alike. If the book's aims are to whet the appetite for future birding trips to the South-East Asia region and to show its birds as the beautiful and exciting creatures they are, then it has certainly succeeded.

Richard Thomas

Stray Feathers



Request for help: Trogons

I am preparing the entries on the trogon family for the *Handbook of the birds of the world*, and would be very grateful to receive reprints and preprints from anyone who has written on these birds, not just as the exclusive subject of study but also any general faunal paper or site-related article, *etc.*, in which trogons are mentioned. Moreover, I also request all readers to send me any unpublished observations which they believe may be valuable or unusual (range extension, feeding habit, breeding behaviour, notes on calls, *etc.*). Please send to: Nigel Collar, 25 Springfield Road, Cambridge CB4 1AD, UK.

Colour-ringed Relict Gulls

Very little is known about the movements of Relict Gulls *Larus relictus* in East Asia. A study has been started to investigate movements of birds from the large breeding colony at Taolimiao-Alashan Nur, Inner Mongolia, China. In mid-June 1998, 567 Relict Gull chicks were ringed with a yellow plastic ring on the left leg and a numbered metal ring on the right leg. Please send any records of marked birds to: David Melville, WWF Hong Kong, GPO Box 12721, Hong Kong; email wwf@wwf.org.hk

Request for information on Singapore birds

Lim Kim Seng is currently preparing an annotated checklist of the birds of

Singapore to be published by the Nature Society (Singapore) and would like any records, published or unpublished, that members may have. All contributions will be fully acknowledged. Please address them to: Lim Kim Seng, Block 644 Yishun Street 61 #12-300, Singapore 760644, fax: 65 7590873

Third International Asian Hornbill Workshop

The Third International Asian Hornbill Workshop will be held in April/May 2000 in Singapore, with a post-workshop excursion to the Budo & Hala-Bala Research Site, south Thailand. If you are interested in attending, please write to either: Ms Ng Bee Choo, c/o Nature's Niche, Bukit Timah Nature Reserve Visitor Centre, 177 Hindhede Drive, Singapore 589333. Tel, +65-4636571, fax +65-4636572, e-mail nniche@singnet.com.sg or Dr Pilai Poonswad, Hornbill Project Thailand, c/o Department of Microbiology, Faculty of Science, Mahidol University, Rama 6 Road, Bangkok 10400, Thailand. Fax 662-6445411, e-mail scpps@mucc.mahidol.ac.th

Birds Australia Parrot Association newsletter

In Bulletin 24 we announced the formation of the Birds Australia Parrot Association. The fourth issue of their newsletter, *Eclectus*, has just been published and contains interesting articles on all aspects of parrots from the

Australasian region. Whilst articles relating to Australian parrots are very welcome, the editor is especially interested in publishing more observations and notes relating to parrot biology and conservation in the south-west Pacific, Melanesia, Wallacea and South-East Asia. If you have material that might be of interest, please contact Peter Brown, Editor *Eclectus*, Tasmanian Parks and Wildlife, GPO Box 44a, Hobart, TAS 7001, Australia, e-mail peterbr@delm.tas.gov.au For information on subscriptions or membership, please contact Birds Australia Conservation and Liaison, Australian Bird Research Centre, 415 Riversdale Road, Hawthorn East, VIC 3123, Australia, e-mail conservation@raou.com.au

Threatened Species Checklists available

BirdLife International has produced a booklet which lists all 1,111 threatened species of birds in the world. Each species is listed with its threat category, an indication of



where it occurs in the world and whether records are urgently needed by BirdLife International. In addition, at the front of each checklist is a simple form where details of sightings of threatened species can be noted so that they can be sent to BirdLife to maintain their database of records. It is

hoped that as many birdwatchers as possible will purchase a copy of the checklist and use the form to send in their records of threatened species. In this simple way birders will be helping to provide valuable data and information on threatened species. Checklists

cost £2 including postage and packing and are available from Communications, BirdLife International, Wellbrook Court, Girton Road, Cambridge CB3 0NA, tel. +44 1 223 277318, fax +44 1 223 277200, e-mail birdlife@birdlife.org.uk

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GENERAL

Taxonomy and phylogeny of reed warblers (genus *Acrocephalus*) based on mtDNA sequences and morphology by Bernd Leisler (Max-Planck-Institut für Verhaltensphysiologie, Vogelwarte Radolfzell, D-78315 Radolfzell, Germany) et al. *Journal für Ornithologie* 138: 469–496. Clarifies taxonomic relationships throughout the genus and establishes specific status for Manchurian Reed Warbler *A. tangorum*.

CHINA

Bar-headed Geese *Anser indicus* wintering in south-central Tibet by Mary A Bishop, Song Yanling, Canjue Zhouma and Gu Binyuan, International Crane Foundation, P O Box 447, Baraboo, WI 53913-0447 USA. *Wildfowl* 48: 118–126. Surveys were carried out over six winters. It is estimated that around 13,000–14,500 Bar-headed Geese, about 25% of the world population, winter in south-central Tibet.

SINGAPORE

Ecology of a mangrove forest bird community in Singapore by N. S. Sodhi, J. P. S. Choo, B. P. Y.-H. Lee, K. C. Quek and A. U. Kara, Dept Biological Sciences, National University of Singapore, Kent Ridge, Singapore 119260. *Raffles Bull. Zoology* 45: 1–13. A report on the bird communities of the Sungei Mandai mangrove forest, which is under threat of reclamation.

The birds of Kent Ridge Park, Singapore by Angus R. Lamont, 2 Ridgewood Close, Block 1, #17-04, Singapore 276693. *Raffles Bull. Zoology* 46: 113–122. A detailed 3.5 year study of the bird diversity of an urban park in Singapore. 157 bird species were noted and a new species for Singapore, Narcissus Flycatcher *Ficedula narcissina alisae*, was recorded.

Status of the Oriental Magpie Robin *Copsychus saularis* in Singapore by S. L. Huong and N. S. Sodhi, Dept Biological Sciences, National University of Singapore, Kent Ridge, Singapore 119260. *Malayan Nat. J.* 50: 347–354. A report on the status of this threatened species in Singapore.

Artificial nest and seed predation experiments in tropical lowland rainforest remnants of Singapore by T. C. M. Wong, N. S. Sodhi and I. M. Turner, Dept Biological Sciences, National University of Singapore, Kent Ridge, Singapore 119260. *Biol. Conserv.* 85: 97–104. Based on artificial nest predation experiments.

THAILAND

Breeding biology of monogamous Asian Paradise Flycatchers *Terpsiphone paradisi*: a special reference to colour dimorphism and exaggerated long tails in males by T. Mizuta and S. Yamagishi, Dept Zoology, Kyoto University, Kitasirakawa-Oiwakecho, Sakyo-ku, Kyoto 606-8502, Japan. *Raffles Bull. Zoology* 46: 101–112. Asian Paradise Flycatchers studied over two years in the Khao Pra-Bang Khram Wildlife Sanctuary.

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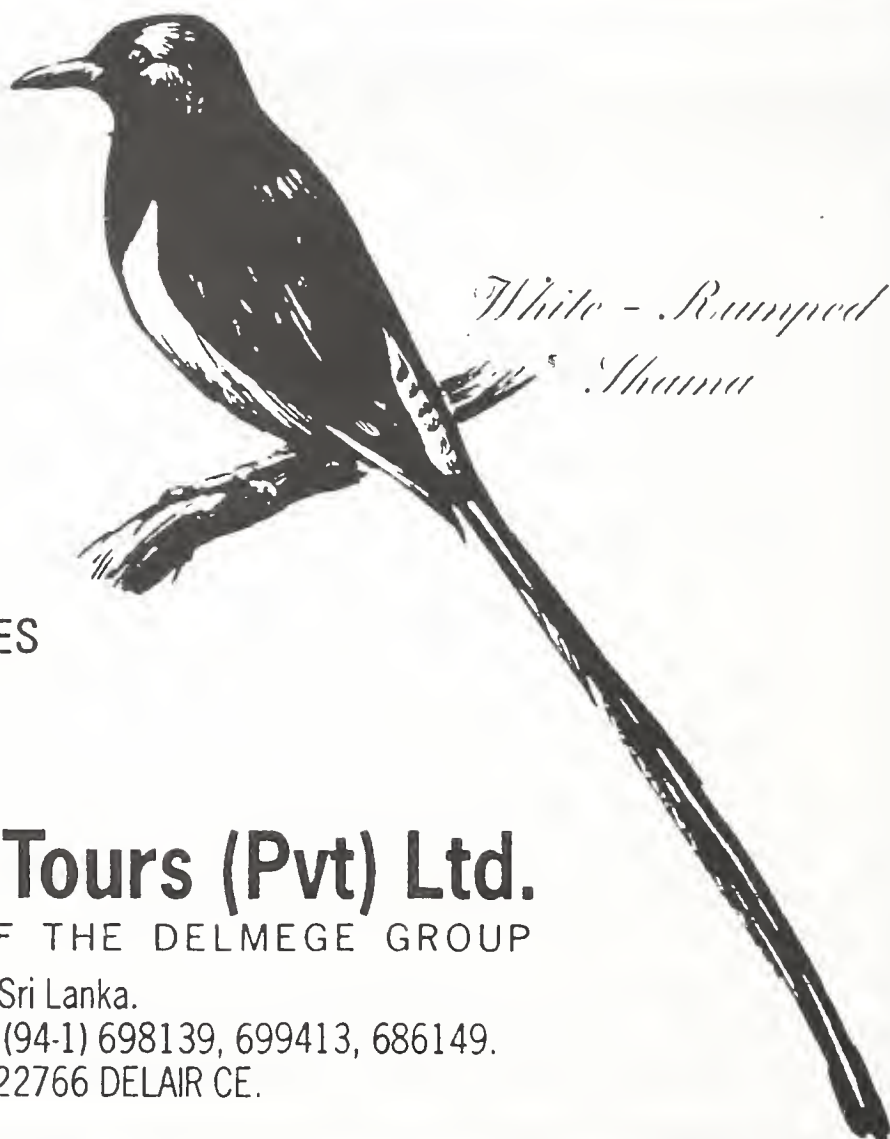
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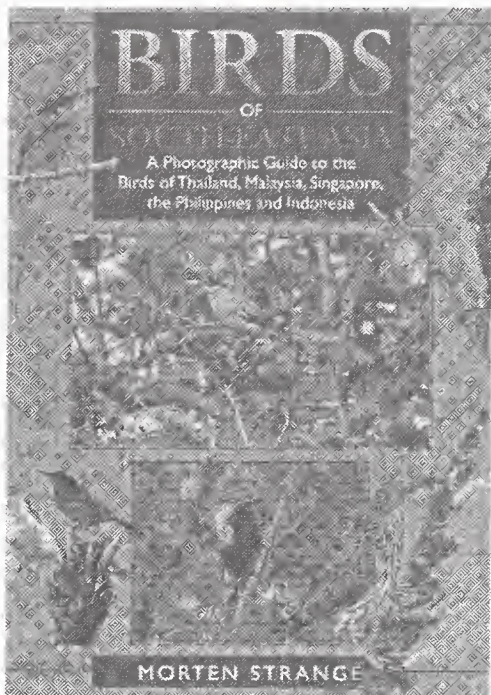
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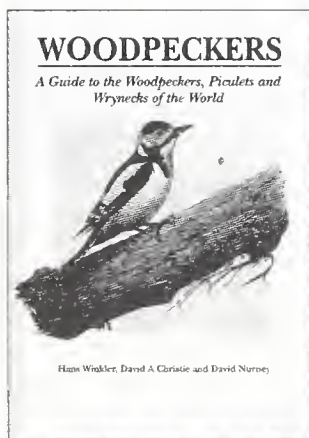
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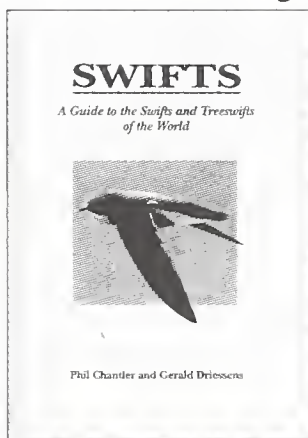
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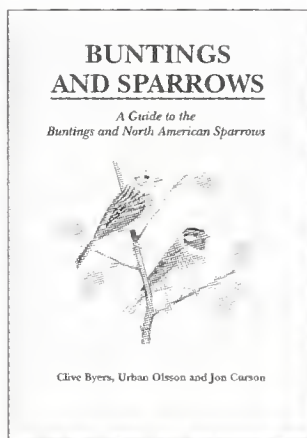
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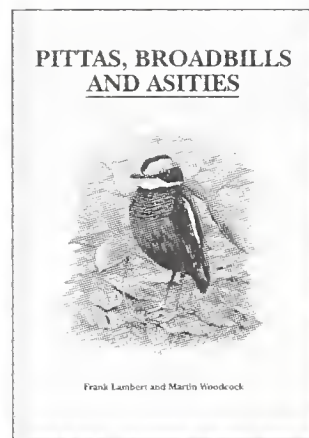
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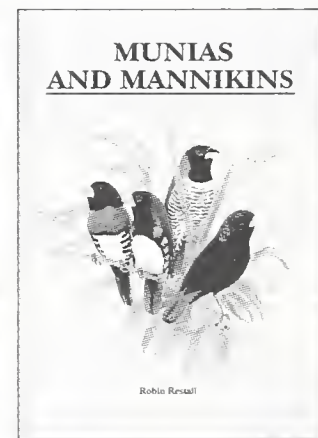
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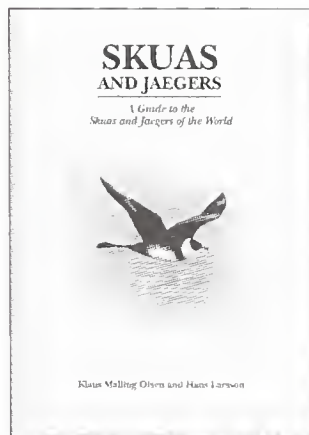
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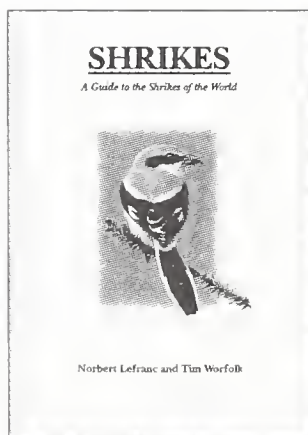
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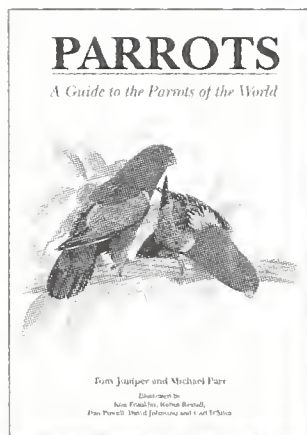
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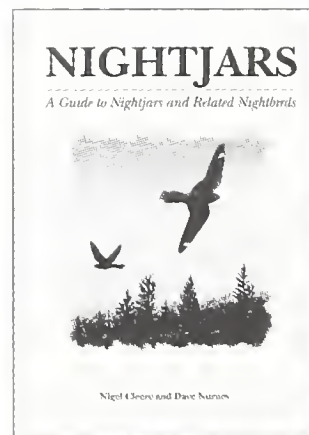
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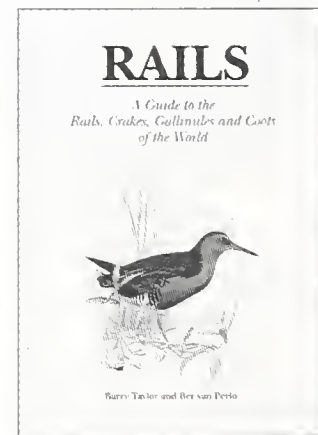
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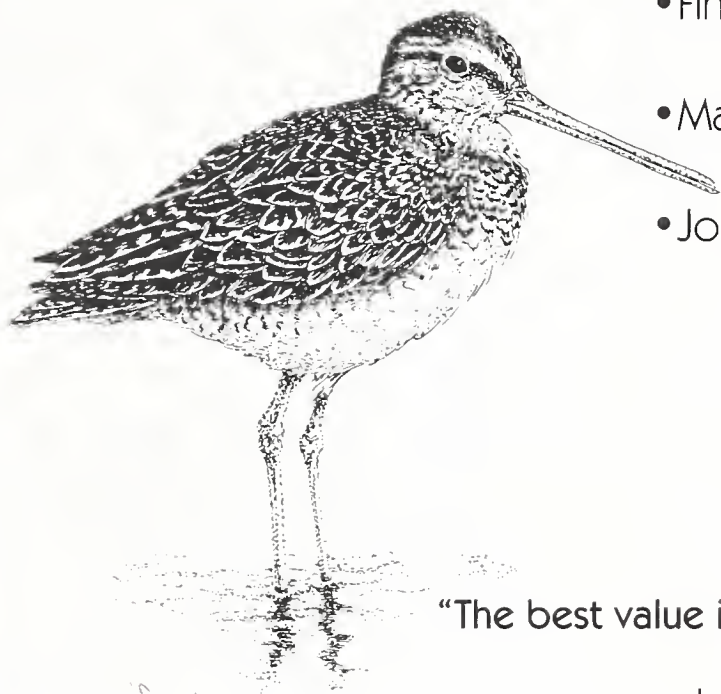
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Guidelines for contributors

Whilst the Editor is always pleased to discuss possible contributions with potential authors, and to advise on preparation, it would be helpful if the following guidelines could be adhered to:

1. **Articles** These should be written clearly, preferably typed, on one side of the page, with all lines double-spaced, leaving wide margins, and should be no longer than 2,000 words. Scientific names should appear at the first mention of each species or, if all species appear in a table, they may be given there instead. Scientific names should, where possible, follow T. Inskipp, N. Lindsey and W. Duckworth (1996) *An annotated checklist of the birds of the Oriental Region*.

Any tables to accompany articles should be prepared on separate pieces of paper, and be thoroughly checked. Titles of tables should be self-explanatory. Diagrams should be clearly drawn, in ink, ideally 15 cm wide and 11 cm high. References should be cited in the order in which they appear during the paper in the same style used in this Bulletin.

It would be helpful if two copies of each contribution could be submitted, and also if possible the text submitted on a computer disk, ideally in Microsoft Word, in either PC or Macintosh format.

2. **From the field** These should follow the format in the current edition of the OBC Bulletin, and be sent to the Bulletin Editor, OBC, c/o The Lodge, Sandy, Bedfordshire, SG19 2DL, UK.
3. **News/Information** Typed or handwritten contributions should be sent to the Bulletin Editor, OBC, c/o The Lodge, Sandy, Bedfordshire, SG19 2DL, UK.

Although every effort is made to retain all articles in their submitted form, the Editorial Committee reserves the right to make changes that it deems necessary, and, in a minimum of cases, without prior reference to the author. It is assumed that all contributors submitting material understand and accept these conditions. All contributors, photographers and artists, in submitting material for the OBC Bulletin, also give permission for their work to be used in the OBC Internet pages.

For Around the Orient, Recently Published, Stray Feathers and Free Press, the deadline for submission of material is 15th February (May Bulletin) and 15th July (November Bulletin). The deadlines do not apply to main articles which will be published as soon as possible after acceptance by the Editorial Committee.



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